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## PATENT OFFICE.

# REPORT

FROM

# THE COMMISSIONER OF PATENTS,

SHOWING

*The operations of the Patent Office during the year* 1841.

February 15, 1842.

On motion of Mr. McClellan,

*Resolved,* That ten thousand extra copies of the Report of the Commissioner of Patents be printed for the use of this House.

Patent Office, *January,* 1842.

Sir: In compliance with the law, the Commissioner of Patents has the honor to submit his annual report.

*Four hundred and ninety-five* patents have been issued during the year 1841, including *fifteen* additional improvements to former patents; of which classified and alphabetical lists are annexed, marked A and B.

During the same period, *three hundred and twenty-seven* patents have expired, as per list marked C.

The applications for patents, during the year past, amount to *eight hundred and forty-seven;* and the number of caveats filed was *three hundred and twelve.*

The receipts of the office for 1841 amount to $40,413 01; from which may be deducted $9,093 30, repaid on applications withdrawn, as per statement D.

The ordinary expenses of the Patent Office for the past year, including payments for the library and for agricultural statistics, have been $23,065 87; leaving a surplus of $8,253 84 to be credited to the patent fund, as per statement marked E.

For the restoration of models, records, and drawings, under the act of March 3, 1837, $20,507 70 have been expended, as per statement marked F.

The whole number of patents issued by the United States, previous to January, 1842, is *twelve thousand four hundred and seventy-seven.*

The extreme pressure in the money market, and the great difficulty in remittance, have, it is believed, materially lessened the number of applications for patents. These have, however, exceeded those of the last year by *eighty-two.*

The resolution of the last Congress, directing the Commissioner to distribute seven hundred copies of the Digest of Patents among the respective States, has been carried into effect, as ordered.

Experience, under the new law reorganizing the Patent Office, shows the importance of some alterations in the present law. One difficulty has been hitherto suggested, viz: the want of authority to refund money that has been paid into the Treasury for the Patent Office, by mistake. Such repayment cannot now be made without application to Congress. The sums, usually, are quite small, not exceeding $30. A bill has been heretofore presented, embracing these cases, and passed one House of the National Legislature; but a general law would save much legislation, and be attended with no more danger than now attends the repayment of money, on withdrawing applications for patents. Indeed, several private petitions are now pending before Congress, and are postponed, to wait final action on the bill which has been so long delayed.

Frauds are practised on the community by articles stamped "patent," when no patent has been obtained; and many inventors continue to sell, under sanction of the patent law, after their patents have expired. To remedy these evils, the expediency of requiring all patentees to stamp the articles vended with the date of the patent, and punishing by a sufficient penalty the stamping of unpatented articles as patented, or vending them as such, either before a patent has been obtained or after the expiration of the same, is respectfully suggested. Almost daily inquiries at the Patent Office exhibit the magnitude of such frauds, and the necessity of guarding effectually against them.

The justice and expediency of securing the exclusive benefit of new and original designs for articles of manufacture, both in the fine and useful arts, to the authors and proprietors thereof, for a limited time, are also respectfully presented for consideration.

Other nations have granted this privilege, and it has afforded mutual satisfaction alike to the public and to individual applicants. Many who visit the Patent Office learn with astonishment that no protection is given in this country to this class of persons. Competition among manufacturers for the latest patterns prompts to the highest effort to secure improvements, and calls out the inventive genius of our citizens. Such patterns are immediately pirated, at home and abroad. A patent introduced at Lowell, for instance, with however great labor or cost, may be taken to England in 12 or 14 days, and copied and returned in 20 days more. If protection is given to designers, better patterns will, it is believed, be obtained, since the impossibility of concealment at present forbids all expense that can be avoided. It may well be asked, if authors can so readily find protection in their labors, and inventors of the mechanical arts so easily secure a patent to reward their efforts, why should not discoverers of designs, the labor and expenditure of which may be far greater, have equal privileges afforded them?

The law, if extended, should embrace alike the protection of new and original designs for a manufacture of metal or other material, or any new and useful design for the printing of woollen, silk, cotton, or other fabric, or for a bust, statue, or bas-relief, or composition in alto or basso-relievo. All this could be effected by simply authorizing the Commissioner to issue patents for these objects, under the same limitations and on the same conditions as govern present action in other cases. The duration of the patent might be *seven* years, and the fee might be *one-half* of the present fee charged to citizens and foreigners, respectively.

On the first alteration of the patent law, I would further respectfully recommend, that authority be given to consuls to administer the oath for applicants for patents. Inventors in foreign countries usually apply to the

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diplomatic corps, who are willing to aid any, and have uniformly administered the usual oath prescribed by the Commissioner of Patents; but as the Attorney General has decided, that consuls cannot, within the meaning of the patent law, administer oaths to inventors, a great convenience would attend an alteration of the law in this respect.

It is due to the clerical force of the office to say, that their labors are arduous and responsible—more so than in many bureaux—while the compensation for similar services in other bureaux is considerably higher. A comparison will at once show a claim for increased compensation, if uniformity is regarded. The chief and sole copyist of the correspondence of this office receives only eight hundred dollars per annum.

The Commissioner of Patents also begs leave to suggest the expediency of including the annual appropriations for the Patent Office in the general bill which provides for other bureaux. Objections hitherto urged against this course, inasmuch as the Patent Office is embraced by a special fund, have induced the committee to report a special bill, which, though reported without objection, has failed for two sessions, because the bill could not be reached, it having been classed with other contemplated acts on the calendar, instead of receiving a preference with other annual appropriations so necessary for current expenses. Were the appropriation for the Patent Office included in a general bill, also designating the fund from which it was to be paid, all objection, it is believed, might be obviated.

During the past year a part of the building erected for the Patent Office has, with the approbation of the Secretary of State, been appropriated to the use of the National Institute, an association which has in charge the personal effects of the late Mr. Smithson, collections made by the exploring expedition, together with many valuable donations from societies and individuals. While it affords pleasure to promote the welfare of that institution by furnishing room for the protection and exhibition of the articles it has in charge, I feel compelled to say that the accommodation now enjoyed can be only temporary. The large hall appropriated by law for special purposes will soon be needed for the models of patented articles, which are fast increasing in number by restoration and new applications, and also for specimens of manufacture and unpatented models. An inspection of the rooms occupied by the present arrangement will show the necessity of some further provision for the National Institute.

The Patent Office building is sufficient for the wants of the Patent Office for many years, but will not allow accommodation for other objects than those contemplated in its erection. The design of the present edifice, however, admits of such an enlargement as may contribute to its ornament, and furnish all necessary accommodation for the National Institute; and also convenient halls for lectures, should they be needed in the future disposition of the Smithsonian legacy. Whatever may be done as regards the extension of the present edifice, it is important to erect suitable outbuildings, and to enclose the public square on which the Patent Office is located.

Some appropriation, too, will be needed for a watch. So great is the value of the property within the building, that a night and day watch is indispensable. The costly articles formerly kept in the State Department for exhibition are now transferred to the National Gallery, where their protection will be less expensive than it was at the State Department, since these articles are guarded in common with others. The late robbery of the jewels, so termed, shows the impropriety of depending on bolts and bars, as ingenuity and depravity seem to defy the strength of metals. A careful supervision at all times, added to the other safeguards, is imperiously demanded. I am happy to say that no injury or loss will be sustained from the robbery just alluded to, with the exception of the reward so successfully offered for the recovery of the articles.

By law, the Commissioner is also bound to report such agricultural statistics as he may collect. A statement annexed (marked G) will show the amount of wheat, barley, oats, rye, buckwheat, Indian corn, potatoes, cotton, tobacco, sugar, rice, &c., raised in the United States in the year 1841. The amount is given for each State, together with the aggregate. In some States the crop has been large, in others there has been a partial failure. Upon the whole, the year has been favorable, affording abundance for home supply, with a surplus for foreign markets, should inducements justify exportation.

These annual statistics will, it is hoped, guard against monopoly or an exorbitant price. Facilities of transportation are multiplying daily; and the fertility and diversity of the soil ensure abundance, extraordinaries excepted. Improvements of only ten per cent. on the seeds planted will add annually fifteen to twenty millions of dollars in value. The plan of making a complete collection of agricultural implements used, both in this and foreign countries, and the introduction of foreign seeds, are steadily pursued.

It will also be the object of the Commissioner to collect, as opportunity offers, the minerals of this country which are applied to the manufactures and arts. Many of the best materials of this description now imported have been discovered in this country; and their use is only neglected from ignorance of their existence among us. The development of mind and matter only leads to true independence. By knowing our resources, we shall learn to trust them.

The value of the agricultural products almost exceeds belief. If the application of the sciences be yet further made to husbandry, what vast improvements may be anticipated ! To allude to but a single branch of this subject. Agricultural chemistry is at length a popular and useful study. Instead of groping along with experiments, to prove what crops lands will bear to best advantage, an immediate and direct analysis of the soil shows at once its adaptation for a particular manure or crop. Some late attempts to improve soils have entirely failed, because the very article, transported at considerable expense to enrich them, was already there in too great abundance. By the aid of chemistry, the West will soon find one of their greatest articles of export to be oil, both for burning and for the manufactures. So successful have been late experiments, that pork (if the lean part is excepted) is converted into stearine for candles, a substitute for spermaceti, as well as into the oil before mentioned. The process is simple and cheap, and the oil is equal to any in use.

Late improvements, also, have enabled experimenters to obtain sufficient oil from corn meal to make this profitable, especially when the residuum is distilled, or, what is far more desirable, fed out to stock. The mode is by fermentation, and the oil which rises to the top is skimmed off, and ready for burning without further process of manufacture. The quantity obtained is 10 gallons in 100 bushels of meal. Corn may be estimated as worth 15 cents per bushel for the oil alone, where oil is worth $1 50 per gallon. The extent of the present manufacture of this corn oil may be conjectured from the desire of a single company to obtain the privilege of supplying the light-houses on the upper lakes with this article. If from meal and pork the country can thus be supplied with oil for burning and for machinery and manufactures, chemistry is indeed already applied most beneficially to aid husbandry.

A new mode of raising corn trebles the saccharine quality of the stalk, and, with attention, it is confidently expected that 1,000 pounds of sugar per acre may be obtained. Complete success has attended the experiments on this subject in Delaware, and leave no room to doubt the fact that, if the stalk is permitted to mature, without suffering the ear to form, the saccharine matter (three times as great as in beets, and equal to cane) will amply repay the cost of manufacture into sugar. This plan has heretofore been suggested by German chemists, but the process has not been successfully introduced into the United States, until Mr. Webb's experiments at Wilmington, the last season. With him the whole was doubtless original, and certainly highly meritorious ; and, though he may not be able to obtain a patent, as the first original inventor, it is hoped his services may be secured to perfect his discoveries. It may be foreign to descend to further particulars in an annual report. A minute account of these experiments can be furnished, if desired. Specimens of the oil, candles, and sugar, are deposited in the National Gallery.

May I be permitted to remark that the formation of a National Agricultural Society has enkindled bright anticipations of improvement. The propitious time seems to have come for agriculture, that long neglected branch of industry, to present her claims. A munificent bequest is placed at the disposal of Congress, and a share of this, with private patronage, would enable this association to undertake, and, it is confidently believed, accomplish much good.

A recurrence to past events will show the great importance of having annually published the amount of agricultural products, and the places where either a surplus or a deficiency exists. While Indian corn, for instance, can be purchased on the Western waters for $1 (now much less) per barrel of 196 pounds, and the transportation, via New Orleans, to New York, does not exceed $1 50 more, the price of meal need never exceed from 80 cents to $1 per bushel in the Atlantic cities. The aid of the National Agricultural Society, in obtaining and diffusing such information, will very essentially increase the utility of the plan before referred to, of acquiring the agricultural statistics of the country, as well as other subsidiary means for the improvement of national industry.

I will only add that, if the statistics now given are deemed important, as they doubtless may prove, to aid the Government in making their contracts for supplies, in estimating the state of the domestic exchanges, which depend so essentially on local crops, and in guarding the public generally against the grasping power of speculation and monopoly, a single clerk whose services might be remunerated from the patent fund, to which it will be recollected more than $8,000 has been added by the receipts of the past year, would accomplish this desirable object. The census of population and statistics, now taken once in ten years, might, in the interval, thus be annually obtained sufficiently accurate for practical purposes.

All which is respectfully submitted.

HENRY L. ELLSWORTH.

Hon. John White,
*Speaker of the House of Representatives.*

## A.

*Classified list of letters patent granted during the year* 1841, *with the names of patentees, place of residence, and date of patent.*

### CLASS 1.—AGRICULTURE,

*Including instruments and operations.*

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Bee-hives | Constant Webb | Wallingford, Ct. | May 4, 1841; antedated March 12, 1841. |
| Bee-hives | James Le Patourel | Chandlersville, O. | June 11, 1841. |
| Bee-hives | John M. Weeks | Salisbury, Vt. | July 1, " |
| Bee-hives | Hiram A. Pitts | Winthrop, Me. | Sept. 25, " |
| Churn | Thomas Pierce | Hartwick, N. Y. | Nov. 10, " |
| Churn, double dasher | Enos Mitchell | Pittston, Me. | May 22, " |
| Corn-sheller | John A. Whitford | Saratoga Springs, N. Y. | Jan. 23, " |
| Corn-sheller | Charles Willis | Chelsea, Mass. | Jan. 27, " |
| Corn-sheller | Nicholas Goldsborough | Eaton, Md. | Feb. 12, " |
| Corn-sheller | Peirson Reading | Batavia, O. | Sept. 25, " |
| Corn-sheller | Joseph H. Derby | Leominster, Mass. | Nov. 10, " |
| Cultivator, called the revolving | George Whitlock | Crown Point, N. Y. | July 10, " |
| Cultivator—see Plough. | | | |
| Hulling and cleaning clover seed | William C. Grimes | York, Pa. | March 3, " |
| Hulling rice and other grains | Webster Herrick | Northampton, Mass. | June 26, " |
| Mowing, cutting, and gathering flax, hemp, &c. | Richard M. Cooch | Lambertsville, N. J. | July 16, " |

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| Mowing, harvesting grain | Alfred Churchill | Geneva, Ill. | March 16, " |
| Mowing, harvesting machines, cutting, thrashing, and winnowing grain | Damon A. Church | Friendship, N. Y. | May 4, " |
| Mowing, scythes, fastening the thole upon the snath | Selah W. Fox and Aretas Ferry | Bernardstown, Mass. | August 4, " |
| Mowing, scythe, securing upon the snath, and fastening the nib to the same | Silas Lamson | Shelburne Falls, Mass. | July 1, " |
| Plough, altering the set of the same | Marshall Mims and Seaborn J. Mims | Starkville, Miss. | Dec. 23, " |
| Plough, attaching mould board and sheath, &c., by means of rivets | Benjamin F. Jewett | Springfield, Ill. | Feb. 12, " |
| Plough, cast iron | Reuben McMillen | Middlebury, O. | Dec. 14, " |
| Plough, combined with a cultivator and planter for ploughing at one operation | William H. Rider, assignee of<br>Justus Rider | Belleville, Ill.<br>Woodburn, Ill. | March 12, " |
| Plough, construction of | David Prouty and John Mears | Dorchester, Mass. | June 16, " |
| Plough, manufacturing of—see Class 14. | | | |
| Plough, wrought iron | Joseph and Henry F. Cromwell | Cynthiana, Ky. | Sept 30, " |
| Seeding, planting corn and other seeds | Ezra L. Miller | Brooklyn, N. Y. | April 10, " |
| Seeding, planting cotton seed | R. S. Thomas | Bennetsville, S. C. | July 30, " |
| Seeding, planting machines, &c. | Joseph Jones | Newton, N. J. | October 11, " |
| Seeding, seed drill or corn-planter | Calvin Olds | Marlborough, Vt. | Jan. 20, " |
| Seeding, seed planters | Moses Pennock and Samuel Pennock | East Marlborough, Pa. | March 12, " |
| Seeding, tilling and planting at the same operation, called the cylindrical tiller and planter | John Schermahorn<br>Rufus Porter | Carroll Co., Ia.<br>New York, N. Y. | April 10, " |
| Smut machine | William B. Palmer | Rochester, N. Y. | April 19, " |
| Smut machine | James Coppuck | Mount Holly, N. J. | April 24, " |
| Smut machine | Jacob Demuth & Ben. Bourman<br>Levi Beck | Lancaster, Pa.<br>Lampeter, Pa. | May 11, " |
| Smut machine | Charles D. Childes | York, N. Y. | July 8, " |

## LIST OF PATENTS—CLASS 1—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Smut machine | Henry A. Buck | Fredonia, N. Y. | July 10, 1841. |
| Smut machine | Thomas R. Bailey and<br>Ezra Rich | Weybridge, Vt.<br>Shoreham, Vt. | July 16, " |
| Smut machine | Lewis Greene | Tiffin, Seneca, O. | October 9, " |
| Smut machine | David Baldwin | Whitehall, N. Y. | Dec. 14, " |
| Smut machine, cleaning grain, &c. | Samuel Bentz | Boonsboro', Md. | July 23, " |
| Smut machine, cleaning grain | Jonas Nolt | West Hempfield, Pa. | August 11, " |
| Smut machine, cleaning grain, &c. | John D. Beers | Philadelphia, Pa. | Dec. 10, " |
| Smut machine, cleaning and separating garlic, &c. from grain | Joseph Heygel | Salisbury, Pa. | Sept. 25, " |
| Smut machine, cleaning and winnowing grain | Zalmon Rice | Lyons, N. Y. | April 24, " |
| Straw-cutters | John B. King | Athens, Tenn. | May 15, " |
| Thrashing grain machines | Ashley Townsend | Le Roy, N. Y. | Dec. 30, " |
| Thrashing machine—see Mowing. | | | |
| Winnowing grain, fanning mills | David Philips<br>Asa Jackson | Georgetown, Pa.<br>Franklin Mills, Va. | May 4, " |

### CLASS 2.—METALLURGY,

*And manufacture of metals and instruments therefor.*

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|---|---|---|---|
| Door, fastening on the inside, instrument for | Benjamin H. Green | Princeton, N. J. | June 11, 1841. |
| Door fasteners, mortise latch | Leonard Foster | Boston, Mass. | August 28, " |
| Door spring | Samuel Sawyer | Boston, Mass. | Jan. 21, " |

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| Ferules of canes, &c., bottom end of, constructing | Jonathan Ball | Buffalo, N. Y. | October 11, " |
| Files, cutting | Levi Anderson | Kensington, Philad., Pa. | Nov. 16, " |
| Forges, blacksmith, bellows attached to hearth | Charles Foster | Rochester, N. Y. | May 11, " |
| Forges and furnaces, water backs for | William McEwen | Norristown, Pa. | Nov. 10, " |
| Furnaces, blast | Stephen Chubbuck and Jedediah Briggs | Wareham, Mass. | Jan. 9, " |
| Furnaces, combination of, for manufacturing wrought iron directly from the ore | Claude S. Quilliard | Roundout, N. Y. | Dec. 23, " |
| Furnaces, hot-air—see Class 5. | | | |
| Furnaces, puddling, (reissue) | Thomas Cooper | New York | March 13, " |
| Gold, separating from its ores, apparatus employed for | Thomas Seay | Columbia, Ga. | May 4, 1841; antedated May 9, 1841. |
| Hearth, blacksmith or forge | Joseph Lanback | Middletown, Pa. | Nov. 10, 1841. |
| Hinges, butt, &c., casting of iron, brass, &c. | William H. Carr, assignee of Thomas Shepherd | Philadelphia, Pa. | October 9, " |
| Hinges, casting on to their axis | Samuel Wilkes | Darleston, Great Britain | April 10, 1841; antedated Jan. 21, 1840. |
| Iron ores, art of smelting, and in certain furnaces applicable thereto | Charles Sanderson | Sheffield, England | Feb. 9, 1841. |
| Keyhole of door and other locks, closing and opening | David Evans | Philadelphia, Pa. | July 10, " |
| Knobs, door, of clay, &c.—see Class 15. | | | |
| Knobs, door, of glass, attaching necks, &c., to | John G. Hotchkiss<br>John A. Davenport and John A. Quincy | New Haven, Ct.<br>New York | Nov. 16, " |
| Latch, door | James M. Hoggan | New Haven, Ct. | Nov. 25, " |
| Latch, door, and other locks | Enoch Robinson and Wm. Hall | Boston, Mass. | March 3, " |
| Latch of door locks | John P. Sherwood | Sandy Hill, N. Y. | May 6, " |

## LIST OF PATENTS—CLASS 2—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Lock, door, combination, patented January 11, 1836 | Solomon Andrews | Perth Amboy, N. J. | Sept. 30, 1841. |
| Lock, door, combined snail-wheel lock | Solomon Andrews | Perth Amboy, N. J. | Feb. 12, " |
| Lock, door, and latches | George W. Wilson | Nashua, N. H. | June 11, " |
| Lock, door, permutation | J. B. Gray | Fredericksburg, Va. | Sept. 18, " |
| Metal, sheet, cutting | Andrew Tracy | Poughkeepsie, N. Y. | July 17, " |
| Moulds for casting butt hinges | Thomas Shepherd and Thomas Loring | Philadelphia, Pa. | March 16, " |
| Pin-making machine | John J. Howe | Derby, N. Haven co., Ct. | March 24, " |
| Pins, sticking into paper, machine for | Samuel Slocum | Poughkeepsie, N. Y. | Sept. 30, " |
| Pipes and tubes from lead, &c. | Benjamin Tatham, jr., Henry B. Tatham, assignees of John and Chas. Hanson, Huddersfield, England | Hitchen, England<br>Philadelphia, Pa. | March 29, 1841; antedated Aug. 31, 1837. |
| Pipes or tubes of lead, tin, &c., machinery for making | George N. Tatham and Benjamin Tatham, jr. | Philadelphia, Pa. | October 11, 1841. |
| Saws, apparatus for filing | Nilson, John Wemmer | Philadelphia, Pa. | March 18, " |
| Screws, metallic | John Luther | Warren, R. I. | June 26, " |
| Screws, wood-cutting | Farwell H. Hamilton | Schenectady, N. Y. | July 8, " |
| Screw-wrench | Loring Coes | Springfield, Mass. | April 16, " |
| Screw-wrench | James Brett | Newburg, N. Y. | July 10, " |
| Scythes, turning and bending heel of | Abel Simonds and Albert G. Page | Fitchburg, Mass. | Dec. 10, " |
| Spikes, heading | Robert S. Harris | Wilmington, Del. | Jan. 25, " |

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| Spikes and nails, forming | William Ballard | New York | July 17, “ |
| Steel, mode of hardening | Perry Davis | Fall River, Mass. | August 4, “ |
| Tin and other metals, cutting | William Bulkley and Otis M. Inman | Berlin, Ct. | Nov. 3, “ |
| Tuyere, blacksmith's, &c. | Elias Kaighn | Kaighn's Point, N. J. | April 2, “ |
| Tuyere, blacksmith's | Riverius C. Stiles and Joseph S. Graves | East Bloomfield, N. Y. | Dec. 14, “ |
| Vices, making the jaws of | William Sim | Schenectady, N. Y. | Oct. 11, “ |
| Window-blind fasteners | Sylvanus Fansher | Southburg, Ct. | April 10, 1841; antedated Dec. 10, 1840. |
| Window fastenings | Enoch Robinson and Wm. Hall | Boston, Mass. | Sept. 11, 1841. |
| Window-shutter fastenings | Thomas C. Cary | Poughkeepsie, N. Y. | Dec. 30, “ |
| Window-shutter and blind fasteners | James P. McKean | Washington, D. C. | April 24, “ |

## CLASS 3.—MANUFACTURES OF FIBROUS AND TEXTILE SUBSTANCES,

*Including machines for preparing fibres of wool, cotton, silk, fur, paper, &c.*

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| Braid-pressing, after it has been trimmed | Henry H. Robbins | Middleborough, Mass. | April 10, 1841. |
| Braid, straw-trimming | Henry H. Robbins | Middleborough, Mass. | Feb. 18, “ |
| Carding machine, cotton or wool | Ebenezer Crane and Alanson Crane | Lowell, Mass. | Jan. 30, “ |
| Carding machine, cotton or wool, &c. | Joseph Munroe | Palmer, Mass. | October 11, “ |
| Carding machine, woollen, condenser for | Levi L. Gowdy | Montgomery, N. Y. | October 11, “ |
| Cloth, folding and measuring | Joel Spalding | Morristown, Vt. | August 28, “ |
| Fabrics, water-proofing | George John Newbery | Citizen U. States, now in London, England | March 30, 1841; antedated May 12, 1840. |

## LIST OF PATENTS—CLASS 3—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Fabrics, water-proofing | Thomas B. Rogers | New York | Nov. 3, 1841. |
| Felt cloths, hardening | Henry A. Wells | New York | Sept. 18, " |
| Felt cloths and hat bodies, shrinking | Henry A. Wells | New York | Sept. 11, " |
| Felt cloths, &c., planking, &c. | Henry A. Wells | New York | Sept. 18, " |
| Flannels, &c., wetting | Joseph W. Hale | Haverhill, Mass. | April 2, " |
| Fulling mill | Sidney E. Coleman | West Haven, Vt. | June 11, " |
| Gin, cotton | Lewis J. Sturdevant | Delaware, Ohio | July 23, " |
| Gin, cotton, grates of saw | Albert Washburn | Bridgewater, Mass. | June 16, " |
| Gin, cotton, railroad | David Philips | Georgetown, Pa. | May 22, " |
| Gin, cotton, saw | C. A. McPhetridge | Natchez, Miss. | April 24, " |
| Hats of leather—see Class 16. | | | |
| Loom, weaving figured cloths, Jacquard, machinery for | Alexander Calderhead | Philadelphia, Pa. | Feb. 3, " |
| Loom, weaving figured damask hair-seating | Samuel Ross | Camden, N. J. | Sept. 18, " |
| Loom, power, stopping when weft and filling fails | O. M. Stillman | Stonington, Con. | Nov. 10, " |
| Loom, temples, opening and closing the jaw | Erastus Williams and Daniel L. Huntingdon | Norwich, Ct. | Nov. 16, " |
| Loom, temples, self-acting rotary | Wm. Craig and John Cochrane | England | Nov. 25, " |
| Loom, weaver's harness, wire heddles for | Abraham Howe and Sidney S. Grannis | Morrisville, N. Y. | Sept. 30, " |
| Loom, weaver's harness, wire heddles for | Abraham Howe and Sidney S. Grannis | Morrisville, N. Y. | Oct. 11, " |
| Paper cutting and trimming books | Fredrick J. Austin | New York | June 16, 1841; antedated Dec. 16, 1840. |

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|---|---|---|---|
| Ropes—see Hides, Class 16. | | | |
| Silk, finishing machinery for | Thomas White | Mount Pleasant, O. | Dec. 30, 1841. |
| Silk reel, driving with the foot | Aaron Clarke | Greenwich, Ct. | Jan. 20, " |
| Silk worms, cocoonery for | J. B. Tillinghast | Huron, Ohio | Nov. 10, " |
| Silk worms, feeding of, apparatus for | Edmund Morris | Burlington N. J. | June 16, " |
| Spinning, domestic wool spinner | John Nelson | Jefferson, Ohio | Jan. 27, " |
| Spinning mules, self-acting, billeys, &c. | Richard Roberts | Manchester, England | Oct. 11, 1841; antedated July 1, 1830. |
| Spinning, speeder for cotton-roping counter-twist | Jesse Whitehead | Manchester, Va. | May 29, 1841. |
| Spinning, ring spinner | David Hunter | Laurel Factory, Md. | July 23, " |
| Spinning, roping cotton | Charles Danforth | Paterson, N. J. | Feb. 18, " |
| Spinning and twisting machinery | Charles Danforth | Paterson, N. J. | May 4, " |
| Wool, &c., combing and preparing | Francis A. Calvert | Lowell, Mass. | Oct. 9, " |
| Wool and cotton, cleaning from burs, &c. | William W. Calvert and Alanson Crane | Chelmsford, Mass. | July 16, " |
| Wool and cotton, ginning, burring, &c. | Francis A. Calvert | Lowell, Mass. | Nov. 25, " |

### CLASS 4.—CHEMICAL PROCESSES, MANUFACTURES AND COMPOUNDS,

*Including medicine, dying, color-making, distilling, soap and candle making, mortars, cements, &c.*

| | | | |
|---|---|---|---|
| Candles, moulding | James Gamble and Joseph S. Hill | Cincinnati, Ohio | Dec. 30, 1841. |
| Cement, hardening manufactures of, &c. | Samuel Goodwin | New York | April 16, " |
| Composition, coating metallic substances, &c. | Arthur Wall | Shadwell, England | June 22, " |
| Composition of matter for manufacture of friction matches | Norman T. Winans, Theodore and Thaddeus Hyatt | New York | Dec. 23, " |
| Composition of matter, manufacture of friction matches | Norman T. Winans, Theodore and Thaddeus Hyatt | New York | Dec. 23, " |

## LIST OF PATENTS—CLASS 4—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Caoutchouc, manufacturing balls of | Charles B. Rogers and Edward Arnold, assigness of Edwin M. Chaffee | Charlestown, Mass.<br>Cambridgeport, Mass. | Jan. 21, 1841. |
| Distilling, art of | Samuel Oliver | Northampton, Pa. | Aug. 4, " |
| Distilling alcohol from whiskey | Augustus V. H. Webb | New York | Aug. 28, " |
| Distilling salt water—see Cabooses, Class 5. | | | |
| Dying black, mordant for | John D. Prince | Lowell, Mass. | April 24, " |
| Fermentation, vinous process of conducting | Charles O. Wolpers | Cincinnati, Ohio | July 16, " |
| Ink, indelible writing | Thomas J. Spear | New Orleans, La. | July 16, " |
| Medicine for the treatment of syphilis, &c. | Silas T. Thurman | Lincoln, Ky. | July 23, " |
| Paint, &c., vessels for preserving | John Raud | Citizen U. S. now in Eng. | Sept 11, " |
| Potash, bleaching ashes with the process of | Joseph H. Ward | Randolph, Ohio | July 16, " |
| Salting animal matters | Charles Payne | South Lambeth, Eng'd | Sept. 11, " |
| Starch, manufacture of | Orlando Jones | City Road, England | March, 12, 1841; antedated April 13, 1840. |
| Sulphate of alumine, process of manufacturing | Rudolph Boniger and Gustava Boniger, assignees of Max. Joseph Funcke | Baltimore, Maryland<br>Eichels-Kamp, Prussia | Jan. 23, 1841; antedated Nov. 16, 1839. |

CLASS 5.—CALORIFIC,

*Comprising lamps, fireplaces, stoves, grates, furnaces for heating buildings, cooking apparatus, preparation of fuel, &c.*

| | | | |
|---|---|---|---|
| Boiler or steamer, construction of - - | Salmon C. Riley - - | New York - - | Oct. 11, 1841. |
| Chimney, apparatus to prevent smoking - | Joseph Hurd, jr. - - | Stoneham, Mass. - | April 24, " |
| Cabooses, adapted to distil salt water - | Michel Rocher - - | Nantes, France - | Aug. 28, " |
| Cooking ranges - - - - | Nathan P. Kingsley - - | Boston, Mass. - | Oct. 11, " |
| Cooking ranges - - - - | Abiram Spaulding - - | New York - - | Nov. 12, " |
| Fireplaces and chimney stacks in buildings | Henry R. Sawyer - - | New York city - | March 26, " |
| Flues, chimney, dampers or valves for - | Normand Smith - - | Hartford, Ct. - - | Jan. 25, " |
| Flues of elevated ovens, combined with cooking stoves - - - - | Rensselaer D. Granger - | Albany, N. Y. - | October 11, " |
| Furnaces for heating air and warming apartments - - - - - | John A. Page - - | Boston Mass. - | Sept. 25, " |
| Furnaces, hot air, and fire-grates for heating apartments - - - - | William H. Whiteley - - | Charlestown, Mass. - | May 11, " |
| Grates of lime kilns - - - | William B. Hill - - | Bellevue, Mich. - | July 30, " |
| Grates of stoves, constructing - - | Gardner Chilson - - | Boston, Mass. - | Sept. 11, " |
| Gridiron, constructing - - - | Isaac Damon - - - | Northampton, Mass. - | Jan. 30, " |
| Heating water, steaming vegetables, &c. - | J. S. Marsh and Asa Munger - | Auburn, N. Y. - | April 2, " |
| Kettles, potash, mode of setting - - | Daniel B. Turner - - | Florence, Ohio - | Sept. 18, " |
| Lamp, Argaud, constructing - - | Benjamin Hemmenway - | Roxbury, Mass. - | Jan. 20, " |
| Lamp, Argaud, constructing - - | John S. Tough - - | Baltimore, Md. - | May 11, " |
| Lamps, burning camphine, &c. - - | Stephen J. Gold - - | Cornwall, Con. - | July 16, " |
| Lamps, burning lard, &c. - - - | Edward T. Williams and Latham T. Tew - - | Newport, R. I. - | June 26, " |
| Lamps, burning lard, tallow, &c. - - | George Carr - - - | Buffalo, N. Y. - | Sept. 4, " |
| Lamps, burning lard, tallow, &c. - | Norman S. Cate - -<br>James H. Putnam - - | Charlestown, Mass.<br>Malden, Mass. | Nov. 16, " |

## LIST OF PATENTS—CLASS 5—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Lamps, burning tallow | Moses S. Woodward | Marshalton, Pa. | Sept. 18, 1841. |
| Lamps, burning volatile ingredients | Isaiah Jennings | New York | Sept. 11, " |
| Lamps, construction of | Christian & Charles Richman | Philadelphia, Pa. | June 11, " |
| Lamps | Benjamin F. Greenough | Boston, Mass. | April 10, " |
| Lamps, gas, &c. | Robert Cornelius | Philadelphia, Pa. | March 18, " |
| Ovens, elevated, combined with cooking and other stoves | Samuel B. Spaulding | Brandon, Vt. | August 28, " |
| Ovens, elevated, combined with cooking stoves, &c. | Eli C. Robinson | Troy, N. Y. | Dec. 30, " |
| Screens, for lifting coal, grain, &c. | Elisha D. Payne and Enos Woodruff | Newark, N. J. | April 19, " |
| Stoves, air-tight | Thomas M. Jones | Boston, Mass. (now in England) | August 11, " |
| Stoves, air-tight, or Arnott stove | Joseph E. Fisk | Salem, Mass. | Nov. 3, " |
| Stoves or bakers for cooking purposes | Mathew Stewart | Philadelphia, Pa. | July 23, " |
| Stoves, constructing | Clark H. Robinson | Uniontown, Pa. | Feb. 13, " |
| Stoves, cooking | M. C. Sadler | Brockport, N. Y. | April 10, " |
| Stoves, cooking | John B. Bissell | Oakville, N. Y. | April 16, " |
| Stoves, cooking | Hiram Blanchard | Acqackanonk, N. J. | April 27, " |
| Stoves, cooking | Samuel L. Chase | Woodstock, Vt. | August 11, " |
| Stoves, cooking | William A. Shepard | Waterville, Me. | August 11, " |
| Stoves, cooking, (reissue) | Samuel L. Chase | Woodstock, Vt. | August 11, " |
| Stoves, cooking | James Root | Cincinnati, Ohio | Sept. 11, " |
| Stoves, cooking | Nelson W. Fisk, assignee of Almond D. Fisk | New York | Nov. 10, " |

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|---|---|---|---|
| Stoves, cooking, or cabooses | Loftis Wood | New York | August 11, " |
| Stoves, cooking and heating | Alexander F. Bean | Woodstock, Vt. | July 8, " |
| Stoves, cooking, railway | R. P. Butrick | Lockport, N. Y. | Sept. 18, " |
| Stoves or furnaces, &c., fire-chambers of | Mathew Stewart, jr. | Philadelphia, Pa. | Nov. 16, " |
| Stoves, parlor | John Backus and Evens Backus | New York | Feb. 18, " |
| Stoves, parlor | Joseph Feinour, jr. | Philadelphia, Pa. | October 11, " |
| Stoves, parlor and dumb, combined | Alonzo L. Blanchard | Albany, N. Y. | Nov. 12, " |
| Stoves, parlor, or open grates for burning anthracite, &c. | Otis Jenks | Albany, N .Y. | Nov. 16, 1841; antedated Nov. 2, 1841. |
| Stove pipes, ornamental slides or plates for covering the flues of | Perry Davis | Fall River, Mass. | August 4, 1841. |

CLASS 6.—STEAM AND GAS ENGINES,

*Including boilers and furnaces therefor, and parts thereof.*

| | | | |
|---|---|---|---|
| Boilers, steam, ascertaining the pressure of steam | George Bradley | Paterson, N. J. | April 16, 1841. |
| Boilers, steam and evaporator, on Marvin & Seely's improvement, patented August 28, 1840 | Oran W. Seely | New York | July 1, " |
| Boilers, steam, caldron, and furnace, combined | Lansing E. Hopkins | New York | October 11, " |
| Boilers, steam, supplying with water, apparatus for | Ethan Campbell | New York | August 28, " |
| Boilers, steam, supplying with water, self-acting apparatus | John Hampson | New Orleans, La. | Sept. 4, " |
| Condensers of steam engines, and apparatus for supplying the boilers with water | Joseyh Echols | Columbus, Ga. | August 11, " |

## LIST OF PATENTS—CLASS 6—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Piston rods of steam engines, &c. | John R. St. John | Cleveland, Ohio | April 27, 1841. |
| Spark arresters | Richard French | Philadelphia, Pa. | June 16, " |
| Spark arresters | Leonard Phleger<br>assignee of Wm. W. Hubbell | Philadelphia, Pa.<br>Moyamensing, Pa. | June 26, " |
| Spark arresters | Leonard Phleger<br>assignee of Wm. W. Hubbell | Philadelphia, Pa.<br>Moyamensing, Pa. | June 26, " |
| Spark arresters | Leonard Phleger<br>assignee of Wm. W. Hubbell | Philadelphia, Pa.<br>Moyamensing, Pa. | June 26, " |
| Spark arresters | Leonard Phleger<br>assignee of Wm. W. Hubbell | Philadelphia, Pa.<br>Moyamensing, Pa. | June 26, " |
| Steam engine | William Whitham | Huddersfield, Eng. | Sept. 4, " |
| Steam engine, &c., governor or regulator of | Louis Lizé | Kingdom of France, (residing in Pittsb'g, Pa.) | Nov. 25, " |
| Steam engine, locomotive, distributing sand, &c., to produce adhesion of driving-wheels | Elisha Tolles | New York | October 9, " |
| Steam engine, locomotive, increasing adhesion of driving-wheel of | Jordan L. Mott | New York | August 28, " |
| Steam engine, locomotive, propelling by stationary power | John A. Etzler | Philadelphia, Pa. | Dec. 23, " |
| Steam engine, locomotive, for railroads | Henry Waterman | Hudson, N. Y. | Feb. 10, " |
| Steam engine, low-pressure, &c. | Charles W. Copeland | New York | June 11, " |
| Steam engine, regulating the pressure of steam | Francis R. Torbet | Paterson, N. J. | March 29, " |
| Steam engine, repeating expansive engine | James Frost | New York | Nov. 3, " |
| Steam engine, rotary | Jesse Tuttle | Boston, Mass. | March 26, " |

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|---|---|---|---|
| Steam engine, rotary | James Jamieson Cords<br>Edward Locke | Citizen of the U. States<br>Newport, England | March 29, 1841; antedated July 18, 1840. |
| Steam engine, rotary | Isaac N. Whittlesey | Vincennes, Ia. | April 2, 1841. |
| Steam engine, rotary | Heman Smith | Sunbury, O. | June 11, " |
| Steam engine, rotary | J. A. Stewart | Cross Plains, Tenn. | October 11, " |
| Steam generating, combined coking oven and boiler | Reuben McMillen | Middlebury, O. | Dec. 14, " |
| Valve of steam engines, cut off | Horatio Allen | New York | August 21, " |
| Valve of steam engines, operating | John Wilder | New York | Jan. 9, " |
| Valve of steam engines, throttle | William Garlin | Providence, R. I. | October 11, " |
| Valve of steam engines, working when the steam is cut off, &c. | Robert L. Stevens and Francis B. Stevens | New York | Jan. 25, " |

CLASS 7.—NAVIGATION AND MARITIME IMPLEMENTS,

*Comprising all vessels for conveyance on water, their construction, rigging, and propulsion; diving-dresses, life-preservers, &c.*

| | | | |
|---|---|---|---|
| Bales of cotton, floating them in the form of rafts | George R. Griffith | Mobile, Ala. | Sept. 25, 1841. |
| Barge and army boats, portable safety | Solomon C. Batchelor | Cincinnati, O. | Jan. 20, " |
| Boats, life and other | Joseph Francis | New York, N. Y. | March 26, " |
| Boats, sub-marine gun | Daniel Fitzgerald | New York | October 11, " |
| Constructing berth of vessels | Harmon King | New York | Sept. 4, " |
| Constructing, boats, vessels, &c. | Joseph Francis | New York | October 11, " |
| Constructing steamboats, and propelling spirally | Thomas J. Wells | New York | Dec. 23, " |
| Constructing steam vessels, and propelling | William W. Hunter<br>Benjamin Harris | United States Navy<br>Norfolk, Va. | March 12, 1841; antedated Nov. 2, 1840. |

## LIST OF PATENTS—CLASS 7—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Constructing steam vessels to prevent sinking | Richard McDonald | Harrisburg, Pa. | Nov. 10, 1841. |
| Floating batteries | Prosper Martin | Philadelphia, Pa. | August 11, " |
| Harpoon | William Carsley | New Bedford, Mass. | July 29, " |
| Life-preserver or buoyant dress | Napoleon Edouard Guérin | New York | Nov. 16, " |
| Propeller | Elisha F. Aldrich | New York | July 30, 1841; antedated Jan. 30, 1840. |
| Propeller | Meredith Mallory | Urbana, N. Y. | August 4, 1841. |
| Propeller | Daniel Fitzgerald | New York | October 9, " |
| Propeller | Francis Pettit Smith | London, England | Nov. 12, 1841; antedated May 31, 1836. |
| Propeller, paddle | Samuel Swett, jr. | Chelsea, Mass. | May 11, 1841. |
| Propeller, paddle, vibrating | Peter Lear | Boston, Mass. | Dec. 30, " |
| Propeller, paddle and water-wheel | William F. Julian | Hartsville, Ia. | June 7, " |
| Propeller, paddle-wheel, &c. | William W. Van Loan | Catskill, N. Y. | March 29, " |
| Propeller, paddle-wheel | P. G. Gardiner | New York, N. Y. | May 4, " |
| Steering boats, brace for | Howard Nichols | New Bedford, Mass. | Sept. 18, " |
| Steering steamboats, apparatus for | Russell Evarts | Madison, Con. | Jan. 5, " |

### CLASS 8.—MATHEMATICAL, PHILOSOPHICAL, AND OPTICAL INSTRUMENTS,

*Including clocks, chronometers, &c.*

| | | | |
|---|---|---|---|
| Alarm, fire | Josiah Brown<br>assignee of Theop. Goodwin | Brentwood, N. H.<br>Exeter, N. H. | Jan. 30, 184. |

| | | | |
|---|---|---|---|
| Barometer | William R. Hopkins | Geneva, N. Y. | Jan. 25, " |
| Clocks | Aaron D. Crane | Newark, N. J. | Feb. 10, 1841; antedated Dec. 22, 1840. |
| Coin, apparatus for counting | Philos B. Tyler, executor of Rufus Tyler, deceased | New Orleans, La. | October 11, 1841. |
| Extension tables, slides of | Charles F. Hobe | New York | June 22, " |
| Lightning conductors, &c. | William A. Orcutt | Boston, Mass. | October 9, " |
| Lightning conductors, &c. | Justin E. Strong | Boston, Mass. | April 19, " |
| Signals, railroad alarm | Samuel Nicolson | Suffolk, Mass. | June 26, " |
| Spectacles, construction of | Christopher H. Smith | Niagara, N. Y. | Nov. 12, " |
| Spectacles, forming the joint, &c. | Thomas Eltonhead | Baltimore, Md. | April 2, " |

CLASS 9.—CIVIL ENGINEERING AND ARCHITECTURE,

*Comprising works on rail and common roads, bridges, canals, wharves, docks, rivers, wiers, dams, and other internal improvements; buildings, roofs, &c.*

| | | | |
|---|---|---|---|
| Blinds, Venetian | John Hampson | New Orleans, La. | August 21, 1841. |
| Bridge | Earl Trumbull | Little Falls, N. Y. | July 10, " |
| Bridge, building | Albert Cottrell | Newport, R. I. | Nov 10, " |
| Bridge, sprail-braced cylinder, &c. | Isaiah Rogers | New York | Nov. 10, " |
| Bridge, truss frames of | John Price & James T. Phelps | Golden, Md. | Feb. 23, " |
| Bridge, truss iron | Squire Whipple | Utica, N. Y. | April 24, " |
| Bridge, wood brace (reissue) | Stephen H. Long | U. S. army | July 20, " |
| Canal lock gate | Robert English | Lagro, Ind. | July 1, " |
| Canal lock gate, sluice | George Heath | Little Falls, N. Y. | Dec. 14, 1841; antedated July, 1841. |
| Canals and mill dams, waste gate opening and closing | Robert Robinson | Greece, N. Y. | Dec. 14, 1841. |

## LIST OF PATENTS—CLASS 9—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Dock, floating dry | John Thomas | New York | June 26, 1841. |
| Dock, floating dry | Dan. Dodge and Phineas Burgess | New York | Oct. 9, " |
| Excavating ditches | George W. Cherry | Washington, D. C. | March 26, " |
| Excavating earth | David C. Lockwood | New Windsor, N. Y. | March 31, " |
| Paving, blocks of wood, &c. | James H. Patterson | New York | Jan. 27, " |
| Paving, blocks of wood, &c. | Stephen Carey | New Orleans, La. | Feb. 3, 1841; antedated Jan. 29, 1839. |
| Paving, blocks of wood, prismatic | John Abbott | Wilton, N. H. | Sept. 25, 1841. |
| Pile driving machine | Robert N. Benson | New Orleans, La. | Sept. 18, " |
| Railroad scrapers, &c. | Hen. M. Naglee and Tho. Raney | Philadelphia, Pa. | Dec. 30, " |
| Raising sunken vessels, machinery for | John Curtis | Yarmouth, Mass. | Dec. 10, " |
| Removing, bars &c., from harbors, rivers, &c. | James R. Putnam | New Orleans, La. | May 6, " |
| Stump extracting | Belden B. Mason<br>Mathews Joslyn | Randolph, N. Y.<br>Napoli, N. Y. | Feb. 10, " |
| Stump extracting | Luke F. Cavenaugh | New Field, N. Y. | May 15, " |
| Wells, artesian, boring, &c. | William Morris | Kanawha county, Va. | Sept. 4, " |

### CLASS 10.—LAND CONVEYANCE,

*Comprising carriages, cars, and other vehicles used on roads, and parts thereof.*

| | | | |
|---|---|---|---|
| Axle and hub for carriage wheels | Henry F. Phillips | Skaneateles, N. Y. | Sept. 18, 1841. |
| Axle of railroad cars, strengthening, &c. | Peter and William C. Allison | Philadelphia, Pa. | Nov. 3, " |

| | | | |
|---|---|---|---|
| Bumper and draught springs on railroad cars | Fowler M. Ray | Catskill, N. Y. | July 29, " |
| Car bodies, railroad | George S. Hacker | Charleston, S. C. | Jan. 21, " |
| Car, railroad, &c. | John A. Whitford | Saratoga Springs, N. Y. | Jan. 20, " |
| Car, railroad, discharging blocks of ice therefrom to platforms | Nathaniel J. Wyeth | Cambridge, Mass. | Dec. 10, " |
| Car, railroad, machinery for elevating and depositing ice in | Nathaniel J. Wyeth | Cambridge, Mass. | Dec. 10, " |
| Car, railroad, turning curves | Perry G. Gardiner, assignee of Isaac Bullock | New York | Oct. 11, " |
| Carriages, railroad | Albert Bridges and Charles Davenport | Cambridgeport, Mass. | May 4, " |
| Springs, carriage | R. B. Brown | Essex, Vt. | Dec. 14, " |
| Springs, elliptical | David A. Edwards | Boston, Mass. | Nov. 16, " |
| Springs, elliptical, forming the sockets of | William T. Richards | Poultney, Vt. | Nov. 16, " |
| Springs and levers to sustain the body of wagons, &c. | Elihu Ring | Trumansburg, N. Y. | July 29, " |
| Springs, pneumatic, piston of, &c. | Alexander Connison | Belleville, N. J. | Dec. 23, 1841; antedated Dec. 20, 1841. |
| Springs, railroad cars, &c. | William Duff | Baltimore, Md. | Jan. 9, 1841. |
| Springs for railroad cars, &c. (reissue) | Fowler M. Ray | Catskill, N. Y. | June 8, " |
| Springs, railroad cars, &c., in which compressed atmospheric air, &c., is employed | Levi Bissell | Newark, N. J. | Oct. 11, " |
| Wheels for railroad, constructing | Henry Dircks | Liverpool, England | June 26, " |

## LIST OF PATENTS—Continued.

### CLASS 11.—HYDRAULICS AND PNEUMATICS,

*Including water-wheels, wind mills, and other implements operated on by air or water, or employed in raising and delivery of fluids.*

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Cocks or faucets, &c. | Henry Rodgers | Auburn, N. Y. | Oct. 9, 1841. |
| Cocks for hydraulic and pneumatic purposes | John Lee Chapman | Baltimore, Md. | Oct. 11, " |
| Cocks for hydrants | Ebenezer Hubball, assignee of Joseph Martin | Baltimore, Md. | Feb. 10, " |
| Cocks for hydrants | Ebenezer Hubball | Baltimore, Md. | May 11, " |
| Cocks and molasses gates, &c. | Levi Lincoln | Hartford, Ct. | Nov. 10, " |
| Cocks, stop | Horatio Allen | New York | Nov. 12, " |
| Engine, fire | Asa Barrett | Baltimore, Md. | Feb. 18, " |
| Engine, fire | Joseph B. Babcock | Marietta, Ohio | July 1, " |
| Hydrostatic or hydraulic press for pressing cotton | John Houpt | Forkland, Ala. | Aug. 21, " |
| Measuring liquids, measures for | John S. Tough | Baltimore, Md. | July 23, " |
| Pump | Jesse Reed | Marshfield, Mass. | April 16, " |
| Pump | William M. Wheeler | Liberty, Mo. | May 15, " |
| Pump | Sidney S. Hogle | Lansingburg, N. Y. | May 29, " |
| Pump | Chapman Warner | Lexington, Ky. | Nov. 10, " |
| Pump | Joel Farnam | Stillwater, N. Y. | Nov. 16, " |
| Pump, air | Joseph Milner Wightman | Boston, Mass. | Nov. 10, " |
| Pump, cattle | Shively Stadon | Greenwood, Pa. | April 2, " |
| Pump, force, double acting | Joel Farnam | Stillwater, Mass. | Nov. 10 " |

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|---|---|---|---|
| Pump, rotary | Samuel A. Lee | Boston, Mass. | Sept. 4, " |
| Pump, suction and force, double acting | Joel Farnam | Stillwater, N. Y. | Dec. 14, " |
| Pump, valve of, &c. | C. D. Van Allen | Petersburg, Va. | July 8, " |
| Pump, valves and pistons of | John Clark | Portsmouth, Va. | October 11, " |
| Raising water, endless chain bucket | John Dutton | Ashton township, D ware county, Pa. | October 9, " |
| Raising water, hydraulic wheels for | Pierre Désiré | New Orleans, La. | Jan. 9, " |
| Syphons, &c. | George Johnson | New York | Dec. 23, " |
| Water, applying to fire engines, &c. | Franklin Ransom and Uzziah Wenman | New York | Feb. 13, " |
| Water wheels | Nelson Johnson | Triangle, N. Y. | June 22, " |
| Water wheels | Clark Lewis | Syracuse, N. Y. | July 16, " |
| Water wheels | Jesse Taylor | Aurelius, N. Y. | Sept. 11, " |
| Water wheels | John G. Garretson | Muhlenburg, Ohio | October 11, " |
| Water wheels | John L. Smith | Salina, N. Y. | Dec. 10, " |
| Water wheels, bucket, openings for admitting water on | Ira Stanbrough | Arcadia, N. Y. | Nov. 25, " |
| Water wheels, current | Noadiah W. Hubbard | Randolph, Ohio | April 2, " |
| Water wheels, reacting | Nathaniel F. Hodges | Corning, N. Y. | July 16, " |
| Windmill | William Zimmerman | Stephenson, Ill. | May 29, " |
| Windmill | Perry Davis | Fall River, Mass. | August 11, " |
| Windmill, horizontal | John M. Van Osdel | Chicago, Ill. | March 12, " |

### CLASS 12.—LEVER, SCREW, AND OTHER MECHANICAL POWER,

*As applied to pressing, weighing, raising, and moving weights.*

| | | | |
|---|---|---|---|
| Balance, platform | Thomas Y. Jennings | Geneva, Ohio | Nov. 10, 1841. |
| Balance, portable | Albert Dole | Bangor, Me. | Dec. 23, " |
| Balance, steelyards | Eli Willemin | Leesburg, Ohio | August 21, " |

## LIST OF PATENTS—CLASS 12—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Balance, weighing apparatus - - | Martin Robbins - - | Hollidaysburg, Pa. - | Jan. 23, 1841. |
| Balance, weighing apparatus - - | Christopher Edward Dampier | Ware, England - | Feb. 12, 1841; antedated Jan. 14, 1840. |
| Buildings, &c., removing - - - | Lewis Pullman - - | Portland, N. Y. - | August 21, 1841. |
| Hoisting, machinery for - - - | John B. Holmes - - | Boston, Mass. - | June 7, " |
| Packing tobacco, staves, &c., of cast iron for | Thomas Samson - - | Richmond, Va. - | May 11, " |
| Press, cheese - - - - | Damon A. Church - - | Friendship, N. Y. - | May 4, " |
| Press, cheese - - - - | Job Arnold - - - | Harmony, N. Y. - | April 2, " |
| Press, cotton - - - - | William C. Van Hoesen - | Catskill, N. Y. - | April 2, " |
| Press, cotton, hay, &c. - - - | Lemuel Bolles, Jedediah Prescott, and Wm. A. Bickford - | Memphis, Tenn. - | Feb. 13, " |
| Press, cotton, hay, &c. - - - | Chales W. Hawkes - - | Brunswick, Me. - | May 29, " |
| Press, hydrostatics—see Class 11. | | | |
| Press, screw, and application to the pressure of claine from tallow - - - | Richard Jones - - | Circleville, Ohio - | October 9, " |
| Press, seal - - - - - | A. Ralston Chase - - | Cincinnati, Ohio - | April 19, " |
| Press, tobacco - - - - | Thomas G. Hardesly - - | Tracy's Landing, Md. - | May 29, " |
| Press, tobacco - - - - | Elliott Richardson - - | West River, Md. - | July 16, " |
| Press, tobacco - - - - | Albert Snead - - | Richmond, Va. - | Sept. 11, " |
| Press, tobacco - - - - | Joseph Bucey - - | West River, Md. - | Dec. 23, " |
| Raising blocks of ice, machinery for - | Nathaniel J. Wyeth - - | Cambridge, Mass. - | Dec. 10, " |
| Raising sunken vessels—see Class 9. | | | |

CLASS 13.—GRINDING MILLS AND MILL GEARING,

*Containing grain mills, mechanical movements, horse powers, &c.*

| | | | |
|---|---|---|---|
| Flour, manufacturing, &c. | Andrew D. Worman | Fredericktown, Md. | July 23, 1841. |
| Gristmill | Ezekiel G. Ward | New York | Feb. 20, " |
| Gristmill | Josiah Platt | Weston, Ct. | October 9, " |
| Gristmill, bush for | George M. Copeland | Geneva, Ohio | October 11, " |
| Gristmill, conical | Samuel Sheldon | Cincinnati, Ohio | Sept. 11, " |
| Gudgeon, friction rollers for | Martin C. Forrist | Foxborough, Mass. | Nov. 16, " |
| Gudgeon, or step of mill spindles, &c. | Jacob Staub | Georgetown, D. C. | May 4, " |
| Horse power | Edmund Warren | New York | Jan. 5, " |
| Horse power | J. Francis Moore | Falmouth, Va. | May 4, " |
| Horse power | Samuel H. Little | Gettysburg, Pa. | June 11, " |
| Horse power, (reissue) | Samuel H. Little | Gettysburg, Pa. | July 1, " |
| Horse power | Thomas J. Wells | New York | July 1, " |
| Horse power | Moses Davenport | Pittsburg, Pa. | Sept. 4, " |
| Horse power, endless chain | Alonzo and Wm. C. Wheeler | Chatham, N. Y. | July 8, " |
| Horse power, endless floor | Jeremiah M. Reed | Middlefield, N. Y. | Jan. 30, 1841; antedated Dec. 9, 1840. |
| Horse power, portable, master wheel of | John A. Taplin | Hammond, N. Y. | Dec. 30, 1841. |
| Mill, cylinder for granulating corn, power bark, &c. | Increase Wilson | New London, Ct. | July 23, " |
| Millstones, dressing with ventilators for cooling the flour, &c. | Pendleton Cheek | Flat Rock, Ga. | August 21, " |
| Mill, universal, for grinding, hulling, &c. | James Bogardus | New York, | July 29, " |
| Mill, wind—see Class 11. | | | |
| Motion, fly wheel, or slide, to multiply | Charles Johnson | Amity, Ill. | Oct. 11, " |
| Power, graduating the velocities of moving bodies | Edwin W. Jackson | Albany, N. Y. | Jan. 5, " |
| Power, maintaining, to drive machinery | Stephen P. W. Douglass | Williamson, N. Y. | May 22, " |

## LIST OF PATENTS—Continued.

### CLASS 14.—LUMBER,

*Including machines and tools for preparing and manufacturing: such as sawing, planing, mortising, shingle and stave, carpenters' and coopers' implements.*

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Auger, uniting to sinker, for boring—see Wells, Class 9. | | | |
| Blocks of wood for paving—see Class 9. | | | |
| Dovetails, cutting square joint | William Perrin | Lowell, Mass. | March 24, 1841. |
| Dovetails and tenons, cutting | Thomas J. Wells | New York, | July 8, " |
| Lathe, turning handles, poles, &c. | Collins & Wistar, assignees of Stacy Costill | Philadelphia, Pa. | June 7, " |
| Lathe, universal chuck | Sidney S. Hogle | Rockville, N. Y. | Nov. 16, " |
| Mortising machine | James King | Morristown, N. J. | March 18, " |
| Planing boards and timber | Hervey Law | Wilmington, N. C. | Sept. 30, " |
| Ploughs, manufacture of | Draper Ruggles, Joel Nourse, and John C. Mason, assignees of Elbridge G. Matthews | Worcester, Mass. | Feb. 23, " |
| Sawing machine, cross cutting | Henry Burger | Danville, Indiana | March 18, " |
| Sawmill | David Philips | Georgetown, Pa. | March 12, " |
| Sawmill | James B. Lowry<br>Philander Eggleston | North East, Pa.<br>Mayville, N. Y. | June 11, " |
| Sawmill | William Bryant | Nashville, Tenn. | June 11, " |
| Sawmill dogs | Damon A. Church | Friendship, N. Y. | April 16, " |
| Sawmill dogs | Linus Yale | Newport, N. Y. | July 29, " |

| | | | |
|---|---|---|---|
| Sawmill, head block of, &c. | James King | Sapling Grove, Va. | Feb. 20, " |
| Sawmill, portable | James C. Mayo | Columbia, Va. | July 29, " |
| Sawmill, portable circular | George Page | Baltimore, Md. | July 16, " |
| Sawmill, resawing boards, &c. | Pearson, Crosby | Fredonia, N. Y. | Nov. 3, " |
| Sawmill, self-setting | Frederick Goodell and Thomas W. Harvey | New York, | Nov. 3, " |
| Sawmill, sustaining logs in | Jeremiah Rohrer | Rohrersville, Md. | May 29, " |
| Shingles, cutting | Truman Walcott | Stow, Mass. | Jan. 20, 1841; antedated Sept. 5, 1840. |
| Shingles, cutting | Lloyd White | Jefferson, Ind. | Nov. 10, 1841. |
| Shingles, riving and dressing | William S. George | Baltimore, Md. | May 29, " |
| Splints, cutting for manufacturing brooms, &c. | Lyman Gleason | Le Roy, N. Y. | October 9, " |
| Splitting timber and making splints, laths, &c. | Benjamin Beach | Clarkesville, Ohio | Nov. 10, " |
| Staves, cutting | Cephas Manning | Acton, Mass. | April 10, " |
| Staves, sawing bilged, for barrels, &c. | Robert Steuart | Michigan City, Ind. | Nov. 25, " |

## CLASS 15.—STONE AND CLAY MANUFACTURES,

*Including machines for pottery, glass-making, brick-making, dressing and preparing stone, cements, and other building materials.*

| | | | |
|---|---|---|---|
| Brick press | Thomas Conklin | Woodville, Miss. | Jan. 23, 1841. |
| Brick press | Thomas W. Smith | Alexandria, D. C. | Jan. 30, " |
| Brick press | Waldren Beach and Ephraim Lukens | Baltimore, Md. | May 22, " |
| Brick press | Charles G. Brown | Caldwell's, N. Y. | October 11, " |
| Brick press and tile | Joseph B. Wilson<br>Alfred R. Crossman | Malden, Mass.<br>Huntingdon, Mass. | Sept. 30, " |
| Clay, moulding and pressing, applied to the construction of fences, &c. | Mercy Wright | Tallytown, Pa. | May 15, " |

## LIST OF PATENTS—CLASS 15—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Glass, moulds for pressing | Hiram Dillaway | Boston, Mass. | August 21, 1841. |
| Knobs of all kinds of clay, &c., making | John G. Hotchkiss<br>John A. Davenport and John W. Quincy | New Haven, Ct.<br>New York, | July 29, “ |
| Mill stones, dressing—see Class 13. | | | |
| Stone, cutting and dressing | Thomas J. Cornell | Worcester, Mass. | Nov. 3, “ |

## CLASS 16.—LEATHER,

*Including tanning and dressing, manufacture of boots, shoes, saddlery, harness, &c.*

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Boots and shoes, manufacturing | Ansel Thayer | Braintree, Mass. | April 24, 1841. |
| Boots, treeing | Elias Hall, jr. | Spencer, Mass. | May 29, “ |
| Crimping leather, clamps for | Josiah M. Read | Boston, Mass. | March 16, “ |
| Currier's beam, constructing the face of | Ichabod Lindsey | Charlestown, Mass. | Jan. 27, “ |
| Harness, blinds of horse bridles | John G. Tibbets | New York | Oct. 9, “ |
| Harness, horse collars, cutting the leather of | Thomas Parkinson | Sparta, N. Y. | July 17, “ |
| Harness, horse collars, stretching, &c. | James P. Osborn | Reddington, N. J. | Jan. 30, “ |
| Hats of leather, manufacturing | James S. and William Wibert | Eden, N. Y. | Sept. 4, “ |
| Hides, raw, and leather, cutting into strips for the manufacture of ropes | Philip B. Holmes and William Pedrick | Charlestown, Mass. | Jan. 9, “ |
| Saddles, spring | Thomas Mordock | Liberty, Ind. | August 28, “ |
| Shoemakers' paring knives | Isaac S. Pendergast | Barnstead, N. H. | July 16, “ |
| Splitting leather | Alpha Richardson | Boston, Mass. | Feb. 9, “ |

| | | | |
|---|---|---|---|
| Tanning hides, &c., process of | Simeon Guilford | Lebanon, Pa. | Nov. 10, " |
| Tanning, removing wool, &c., from skins of animals | Francis and Hason Robinson | Wilmington, Del. | May 15, " |
| Trunks, travelling | John Fitzgibbon | Philadelphia, Pa. | Oct. 11, " |

CLASS 17.—HOUSEHOLD FURNITURE, MACHINES, AND IMPLEMENTS FOR DOMESTIC PURPOSES,

*Including washing machines, bread and cracker machines, feather dressing, &c.*

| | | | |
|---|---|---|---|
| Bedstead, cutting screws of the rails of | Joel Thompson | Cynthiana, Ky. | July 29, 1841. |
| Bedstead, cutting tenons and boring holes in the rails of | Thomas Cole | Greensburg, Ind. | Nov. 12, " |
| Bedstead, fastening of | Hermann C. Ernst | Vandalia, Ill. | Feb. 23, " |
| Bedstead, securing and fastening the rails of | John P. Allen | Manchester, Mass. | Nov. 3, " |
| Bedstead, sofa | James M. Meschutt | New York | July 23, " |
| Brushes, attaching the bristles to | Robert B. Lewis | Hallowell, Me. | Feb. 23, " |
| Chair, recumbent | Henry P. Kennedy | Philadelphia, Pa. | May 22, 1841; antedated Apr. 12, 1841. |
| Clothes-horse, connecting the frames of | Harvey Luther | Providence, R. I. | May 19, 1841. |
| Crackers, cutting | William Perkins | Boston, Mass. | April 2, " |
| Crackers, cutting | Charles P. Fobes | Baltimore, Md. | July 17, " |
| Crackers, cutting | William R. Nevins | New York | Nov. 10, " |
| Crackers, making | Riley Darling | East Greenwich, R. I. | Sept. 30, " |
| Cutting blubber | George and John J. Kilburn | Fall River, N. Y. | Nov. 16, " |
| Feathers, drying, whipping, and cleaning | Nathaniel L. Manning | Boston, Mass. | April 16, " |
| Palm leaf or brub grass for stuffing beds, (re-issue) | Elias Howe, assignee of Joseph C. Smith | Cambridgeport, Mass. | March 18, " |
| Palm leaf, splitting—see Class 22. | | | |

## LIST OF PATENTS—CLASS 17—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Refrigerator | Job S. Gold | Philadelphia, Pa. | March 12, 1841. |
| Washing machine | George Waterman | Johnston, R. I. | May 11, " |
| Washing machine | Horatio N. Walter | Norwich, N. Y. | June 22, " |
| Washing machine | Leonard Procter | New York | Nov. 16, " |

## CLASS 18.—ARTS, POLITE, FINE, AND ORNAMENTAL,

*Including music, painting, sculpture, engraving, books, paper, printing, binding, jewelry, &c.*

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Block printing on woven fabrics of cotton, &c. | Robert Hampson | Manchester, Gt. Britain | June, 7, 1841; antedated June 9, 1840. |
| Copy books, and method of binding the same | William Davison | Baltimore, Md. | October 9, 1841. |
| Files or ready binders for filing pamphlets, &c. | Isaac Detterer | Philadelphia, Pa. | May 22, " |
| Inking type, machine for | Frederick J. Austin | New York | Feb. 20, " |
| Inkstand | George Burnham | Philadelphia, Pa. | Dec. 30, " |
| Inkstand, capillary wick, &c. | Isaac M. Moss,<br>assignee of John Farley | Philadelphia, Pa.<br>Washington, D. C. | Jan. 30, " |
| Pen, fountain, &c. | William Davison | Baltimore, Md. | Oct. 9, " |
| Piano forte | Lemuel Gilbert | Boston, Mass. | July 10, " |
| Piano forte | Daniel B. Newhall | Boston, Mass. | Nov. 3, " |
| Piano forte, action part of | Timothy Gilbert | Boston, Mass. | Feb. 10, " |
| Piano forte, hammer heads used in | Timothy Gilbert | Boston, Mass. | Feb. 10, " |
| Piano forte, horizontal | Frederick C. Reichenbach | Philadelphia, Pa. | May 19, " |

| | | | |
|---|---|---|---|
| Piano forte, keys in | Dan. B. Newhall and Levi Wilkins, assignees of John Dwight | Boston, Mass. | May 6, “ |
| Polishing plates, used in taking likenesses, apparatus for | John Johnson | New York | Dec. 14, “ |
| Type, setting, machines for | James Hadden Young and Adrien Delcambre | England<br>France | June 22, “ |

CLASS 19.—FIRE-ARMS AND IMPLEMENTS OF WAR, AND PARTS THEREOF,

*Including the manufacture of shot and gunpowder.*

| | | | |
|---|---|---|---|
| Batteries, floating—see Class 7. | | | |
| Cannon balls, manufacturing, &c., from malleable iron | Lew. Grandy and Thos. Osgood | Troy, N. Y. | Feb. 3, 1841 |
| Fire arms, manner of discharging them, &c. | Joshua Shaw | Philadelphia, Pa. | Jan. 30, “ |
| Fire arms, portable | Charles Louis Stanislaus, Baron Heurteloup | Subject of France | July 29, 1841; antedated Feb. 23, 1839. |
| Gunpowder, corning or graining | Leonard T. Swett | Canton, Ct. | Nov 16, 1841. |
| War rockets, boring | Alvin C. Goell | Washington, D. C. | March 18, “ |
| War rockets, press for filling | Alvin C. Goell | Washington, D. C. | Feb. 18, “ |

CLASS 20.—SURGICAL AND MEDICAL INSTRUMENTS,

*Including trusses, dental instruments, bathing apparatus, &c.*

| | | | |
|---|---|---|---|
| Lacteal or artificial breast | Charles M. Windship, M. D. | Roxbury, Mass. | Feb. 18, 1841. |
| Lancet, spring | John M. Van Osdel | Chicago, Ill. | April 24, “ |

## LIST OF PATENTS—CLASS 20—Continued.

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Legs, apparatus for the relief of debility in the | Stephen P. W. Douglass | Palmyra, N. Y. | May 15, 1841. |
| Speculum ani | Joseph T. Pitney | Auburn, N. Y. | July 23, " |
| Tooth extractor | Moses I. Hill | Bloomfield, Ind. | June 7, " |
| Truss for prolapsus uteri | John A Campbell, M. D. | Lima, N. Y. | April 10, " |
| Truss for reducible hernia, method of treating, &c. | Zophar Jayne | Carrollton, Ill. | April 2, " |

### CLASS 21.—WEARING APPAREL, ARTICLES FOR THE TOILET, &c., *Including instruments for manufacturing.*

| Inventions or discoveries. | Patentees. | Residence. | When issued. |
|---|---|---|---|
| Buttons, attaching to cloth | Henry S. Poole | Boston, Mass. | Aug. 11, 1841. |
| Buttons, manufacturing of | Thomas Prosser | Paterson, N. J. | July 29, 1841; antedated Jan. 29, 1841. |
| Corsets | Elizabeth Adams | Boston, Mass. | Jan. 21, 1841. |
| Corsets | Alanson Abbe | Worcester, Mass. | April 2, " |
| Garments, pockets of | Daniel Harrington | Philadelphia, Pa. | Oct. 11, " |
| Garments, tailors' instruments and mode of measuring | Lewis Flenner | Philadelphia, Pa. | Nov. 10, " |
| Garments, tailors' measures | Lyman B. and Ellery Miller | Wall Hill, N. Y. | May 29, " |
| Garments, taking measure and draughting | Aaron A. Tentler | Philadelphia, Pa. | Jan. 23, " |
| Suspender straps, attaching to pantaloons | David B. Cook | New York | Sept. 4, " |

CLASS 22.—MISCELLANEOUS.

| | | | |
|---|---|---|---|
| Fire escape - - - - - | Samuel Welsh and Thomas Linacree - - - | Albany, N. Y. - | Jan. 23, 1841. |
| Ice, forming - - - - | Thomas Briggs Smith - | St. Louis, Mo. - | Jan. 23, " |
| Knives, &c., handles for - - - | Zina K. Murdock - - | Meriden, Ct. - - | April 16, " |
| Palm leaf, machine for splitting - - | Corey McFarland - - | Barre, Mass. - - | March 31, " |

*Improvements added to original patents granted during the year* 1841.

| atentees. | Residence. | Inventions or discoveries. | When issued. | |
|---|---|---|---|---|
| | | | Patent. | Improvement. |
| Allen, Samuel S. | Miamisburg, Ohio | Husking and shelling corn | June 15, 1840 | Mar. 29, 1841. |
| Cross, Jefferson | Morrisville, N. Y. | Cooking stove | June 27, 1838 | Feb. 18, " |
| Cushwa, Benjamin | Clear Spring, Md. | Self-adjusting log brace | July 15, 1840 | June 19, " |
| Dyott, Michael B. | Philadelphia, Pa. | Burners for camphine lamps | Aug. 25, 1840 | Mar. 18, " |
| Gail, Titus D. | Eden, N. Y. | Butter working and pressing machine | Oct. 10, 1840 | July 20, " |
| Garber, Samuel and Henry Swartzengrover | Norristown, Pa. | Process of burning lime | Mar. 25, 1837 | June 19, " |
| Gibbons, Joseph | Adrian, Mich. | Planting and sowing of seeds, &c. | Aug. 25, 1840 | May 4, " |
| Hall, William M. | Wallingford, Ct. | Bee-hives | Dec. 27, 1839 | Mar. 29, " |
| Morison, Benjamin | Harrisburg, Pa. | Counter scale, called "Druggist scale" | Feb. 16, 1837 | Mar. 29, " |
| Newhall, Daniel | Lynn, Mass. | Trough of the apparatus for destroying the canker worm | Oct. 31, 1840 | April 24, " |
| Shailer, Reuben | Haddam, Ct. | Tanning, process of scraping hides, &c. | June 19, 1837 | Feb. 9, " |
| Snyder, Isaac | Carrollton, Pa. | Self-sharpening plough | July 29, 1837 | May 11, " |
| Southworth, Daniel H. | Little Falls, N. Y. | Cleaning rice, wheat, &c. | Aug. 23, 1838 | Aug. 12, " |
| Spencer, William | Lowell, Mass. | Dying yarn from the beam, called Spencer's improved dying machine | Sept. 25, 1838; reissued May 28, 1840 | April 17, " |
| Whitehead, Jesse | Manchester, Va. | Counter twist speeder for cotton roping | May 29, 1841 | Oct. 11, " |

## B.

*Alphabetical list of patentees for the year* 1841, *with their places of residence.*

| Patentees. | Residence. |
|---|---|
| Abbe, Alanson - - - | Worcester, Massachusetts. |
| Abbott, John - - - | Wilton, New Hampshire. |
| Adams, Elizabeth - - - | Boston, Massachusetts. |
| Aldrich, Elisha F. - - - | New York city. |
| Allen, Horatio - - - | New York city. |
| Allen, Horatio - - - | New York city. |
| Allen, John P. - - - | Manchester, Massachusetts. |
| Allison, Peter and William C. - | Philadelphia, Pennsylvania. |
| Anderson, Levi - - - | Kensington, Philadelphia, Pa. |
| Andrews, Solomon - - | Perth Amboy, New Jersey. |
| Arnold, Job - - - | Harmony, New York. |
| Austin, Frederick J. - - | New York city. |
| Austin, Frederick J. - - | New York city. |
| Babcock, Joseph B. - - | Marietta, Ohio. |
| Backus, John and Evans - - | New York city. |
| Bailey, Thomas R. - - | Weybridge, Vermont. |
| and Ezra Rich - - - | Shoreham, Vermont. |
| Baldwin, David - - - | Whitehall, New York. |
| Ball, Jonathan - - - | Buffalo, New York. |
| Ballard, William - - - | New York city. |
| Barrett, Asa - - - | Baltimore, Maryland. |
| Batchelor, Solomon C. - - | Cincinnati, Ohio. |
| Beach, Benjamin - - - | Clarkesville, Ohio. |
| Beach, Waldren, and E. Lukens - | Baltimore, Maryland. |
| Bean, Alexander F. - - | Woodstock, Vermont. |
| Beard, Ebenezer - - - | New Sharon, Maine. |
| Beers, John D. - - - | Philadelphia, Pennsylvania. |
| Benson, Robert N. - - - | New Orleans, Louisiana. |
| Bentz, Samuel - - - | Boonsboro', Maryland. |
| Bissell, John B. - - - | Oakville, New York. |
| Bissell, Levi - - - | Newark, New Jersey. |
| Blanchard, Alonzo L. - - | Albany, New York. |
| Blanchard, Hiram - - - | Aquackanonk, New Jersey. |
| Bogardus, James - - - | New York city. |
| Bolles, Lemuel, Jedediah Prescott, and William A. Bickford | Memphis, Tennessee. |
| Boninger, Rudolph, and Gustava Boninger, (assignees of Max. Joseph Funcke) - - - | Baltimore, Maryland. |
| Bradley, George - - - | Paterson, New Jersey. |
| Brett, James - - - | Newburg, New York. |
| Bridges, Albert, and Chs. Davenport | Cambridgeport, Massachusetts. |
| Brown, Charles G. - - | Caldwell, New York. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| Brown, Josiah, (assignee of Theophilus Goodwin) | Brentwood, Massachusetts. |
| Brown, R. B. | Essex, Vermont. |
| Bryant, William | Nashville, Tennessee. |
| Bucey, Joseph | West River, Maryland. |
| Buck, Henry A. | Fredonia, New York. |
| Bulkley, Wm., and Otis M. Inman | Berlin, Connecticut. |
| Bullock, Isaac—see Gardiner, P. G. | |
| Burger, Henry | Danville, Indiana. |
| Burnham, George | Philadelphia, Pennsylvania. |
| Butrick, R. P. | Lockport, New York. |
| Calderhead, Alexander | Philadelphia, Pennsylvania. |
| Calvert, Francis A. | Lowell, Massachusetts. |
| Calvert, Francis A. | Lowell, Massachusetts. |
| Calvert, William W., and Alanson Crane | Chelmsford, Massachusetts. |
| Campbell, Ethan | New York city. |
| Campbell, John A. | Lima, New York. |
| Carey, Stephen | New Orleans, Louisiana. |
| Carey, Thomas C. | Poughkeepsie, New York. |
| Carr, George | Buffalo, New York. |
| Carr, William, (assignee of Thomas Shepherd) | Philadelphia, Pennsylvania. |
| Carsley, William | New Bedford, Massachusetts. |
| Cate, Norman S. | Charlestown, Massachusetts. |
| and James H. Putnam | Malden, Massachusetts. |
| Cavenaugh, Luke F. | Newfield, New York. |
| Chaffe—see Rogers. | |
| Chapman, John Lee | Baltimore, Maryland. |
| Chase, A. Ralston | Cincinnati, Ohio. |
| Chase, Samuel L. | Woodstock, Vermont. |
| Chase, Samuel L., (reissue) | Woodstock, Vermont. |
| Cheek Pendleton | Flat Rock, Georgia. |
| Cherry, George W. | Washington, District of Columbia. |
| Childs, Charles D. | York, New York. |
| Chilson, Gardner | Boston, Massachusetts. |
| Chubbuck, Stephen, and Jedediah Briggs | Wareham, Massachusetts. |
| Church, Damon A. | Friendship, New York. |
| Church, Damon A. | Friendship, New York. |
| Church, Damon A. | Friendship, New York. |
| Churchill, Alfred | Geneva, Illinois. |
| Clark, John | Portsmouth, Virginia. |
| Clarke, Aaron | Greenwich, Connecticut. |
| Coes, Loring | Springfield Massachusetts. |
| Cole, Thomas | Greensbury, Indiana. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| Coleman, Sidney E. | West Haven, Vermont. |
| Collins and Wistar, (assignees of Stacy Costill) | Philadelphia, Pennsylvania. |
| Conklin, Thomas | Woodville, Mississippi. |
| Connison, Alexander | Belleville, New Jersey. |
| Cooch, Richard M. | Lambertsville, New Jersey. |
| Cook, David B. | New York city. |
| Cooper, Thomas, (reissue) | New York city. |
| Copeland, Charles W. | New York city. |
| Copeland, George M. | Geneva, Ohio. |
| Coppuck, James | Mount Holly, New Jersey. |
| Cornelius, Robert | Philadelphia, Pennsylvania. |
| Cornell, Thomas J. | Worcester Massachusetts. |
| Cordes, James Jamieson | Citizen of the United States. |
| Edward Locke | Newport, England. |
| Costill, S.—see Collins and Wistar. | |
| Cottrell, Albert | Newport, Rhode Island. |
| Craig, William, and John Cochrane | England. |
| Crane, Aaron D. | Newark, New Jersey. |
| Crane, Ebenezer and Alanson | Lowell, Massachusetts. |
| Cromwell, Joseph and Henry F. | Cynthiana, Kentucky. |
| Crosby, Pearson | Fredonia, New York. |
| Custis, John | Yarmouth, Massachusetts. |
| Damon, Isaac | Northampton, Massachusetts. |
| Dampier, Christopher Edward | Ware, England. |
| Danforth, Charles | Paterson, New Jersey. |
| Danforth, Charles | Paterson, New Jersey. |
| Darling, Riley | East Greenwich, Rhode Island. |
| Davenport, Moses | Pittsburg, Pennsylvania. |
| Davis, Perry | Fall River, Massachusetts. |
| Davis, Perry | Fall River, Massachusetts. |
| Davis, Perry | Fall River, Massachusetts. |
| Davison, William | Baltimore, Maryland. |
| Davison, William | Baltimore, Maryland. |
| Demuth, Jacob, and Benj. Bowman | Lancaster, Pennsyluania. |
| Levi Beck | Lampeter, Pennsylvania. |
| Derby, Joseph H. | Leominster, Massachusetts. |
| Deterrer, Isaac | Philadelphia, Pennsylvania. |
| Dillaway, Hiram | Boston, Massachusetts. |
| Dircks, Henry | Liverpool, England. |
| Dodge, Dan'l, and Phineas Burgess | New York city. |
| Dole, Albert | Bangor, Maine. |
| Douglass, Stephen P. W. | Palmyra, New York. |
| Douglass, Stephen P. W. | Williamson, New York. |
| Duff, William | Baltimore, Maryland. |
| Duttón, John | Aston township, Delaware co., Pa. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| Dwight—see Newhall and Wilkins. | |
| Echols, Josephus | Columbus, Georgia. |
| Edwards, David A. | Boston, Massachusetts. |
| Eltonhead, Thomas | Baltimore, Maryland. |
| English, Robert | Lagro, Indiana. |
| Ernst, Hermann C. | Vandalia, Illinois. |
| Etzler, John A. | Philadelphia, Pennsylvania. |
| Evans, David | Philadelphia, Pennsylvania. |
| Evarts, Russell | Madison, Connecticut. |
| Fancher, Sylvanus | Southbury, Connecticut. |
| Farley, John—see Moss, Isaac M. | |
| Farnam, Joel | Stillwater, New York. |
| Farnam, Joel | Stillwater, New York. |
| Farnam, Joel | Stillwater, New York. |
| Feinour, Joseph, jr. | Philadelphia, Pennsylvania. |
| Fisk, Joseph E. | Salem, Massachusetts. |
| Fisk, N. W. (assignee of A. D. Fisk) | New York city. |
| Fitzgerald, Daniel | New York city. |
| Fitzgerald, Daniel | New York city. |
| Fitzgibbon, John | Philadelphia, Pennsylvania. |
| Flenner, Lewis | Philadelphia, Pennsylvania. |
| Fobes, Edwin—see Gilbert, T. | |
| Forbes, Charles P. | Baltimore, Maryland. |
| Forrist, Martin C. | Foxborough, Massachusetts. |
| Foster, Charles | Rochester, New York. |
| Foster, Leonard | Boston, Massachusetts. |
| Fox, Selah W., and Aretas Ferry | Bernardstown, Massachusetts. |
| Francis, Joseph | New York city. |
| Francis, Joseph | New York city. |
| French, Richard | Philadelphia, Pennsylvania. |
| Frost, James | Brooklyn, New York. |
| Gamble, James, and Joseph S. Hill | Cincinnati, Ohio. |
| Gardiner, Perry G. | New York city. |
| Gardiner, Perry G., (assignee of Isaac Bullock) | New York city. |
| Garlin, William | Providence, Rhode Island. |
| Garretson, John G. | Muhlenburg, Ohio. |
| George, William S. | Baltimore, Maryland. |
| Gilbert, Lemuel | Boston, Massachusetts. |
| Gilbert, Timothy (assignee of Edwin Fobes) | Boston, Massachusetts. |
| Gilbert, Timothy | Boston, Massachusetts. |
| Gleason, Lyman | Le Roy, New York. |
| Goell, Alvin C. | Washington, District of Columbia. |
| Goell, Alvin C. | Washington, District of Columbia. |
| Gold, Job S. | Philadelphia, Pennsylvania. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| Gold, Stephen J. | Cornwall, Connecticut. |
| Goldsborough, Nicholas | Easton, Maryland. |
| Goodell Frederick, and Thomas W. Harvey | New York city. |
| Goodwin, Samuel | New York city. |
| Goodwin, Theophilus | Exeter, New Hampshire. |
| Gowdy, Levi L. | Montgomery, New York. |
| Grandy, Lewis, and Thomas Osgood | Troy, New York. |
| Granger, Rensselaer D. | Albany, New York. |
| Gray, I. B. | Fredericksburg, Virginia. |
| Green, Benjamin H. | Princeton, New Jersey. |
| Greene, Lewis | Tiffin, Seneca county, Ohio. |
| Greenough, Benjamin F. | Boston, Massachusetts. |
| Griffith, George R. | Mobile, Alabama. |
| Grimes, William C. | York, Pennsylvania. |
| Guérin, Napoleon Edouard | New York city. |
| Guilford, Simeon | Lebanon, Pennsylvania. |
| Hacker, George S. | Charleston, South Carolina. |
| Hale, Joseph W. | Haverhill, Massachusetts. |
| Hall, Elias, jr. | Spencer, Massachusetts. |
| Hamilton, Farwell H. | Schenectady, New York. |
| Hampson, John | New Orleans, Louisiana. |
| Hampson, John | New Orleans, Louisiana. |
| Hampson, Robert | Manchester, England. |
| Hanson—see Tatham | |
| Hardesty, Thomas G. | Tracy's Landing, Maryland. |
| Harrington, Daniel | Philadelphia, Pennsylvania. |
| Harris, Robert S. | Wilmington, Delaware. |
| Hawkes, Charles W. | Brunswick, Maine. |
| Heath, George | Little Falls, New York. |
| Hemmenway, Benjamin | Roxbury, Massachusetts. |
| Henry, Pierre Désiré | New Orleans, Louisiana. |
| Herrick, Webster | Northampton, Massachusetts. |
| Heurteloup, Chs. Lewis Stanislaus, Baron | France. |
| Heygel, Joseph | Salisbury, Pennsylvania. |
| Hill, Moses I. | Bloomfield, Indiana. |
| Hill, William B. | Bellevue, Michigan. |
| Hobday, John, and Wm. I. Cocke | Portsmouth, Virginia. |
| Hobe, Charles F. | New York city. |
| Hodges, Nathaniel F. | Corning, New York. |
| Hoggan, James M. | New Haven, Connecticut. |
| Hogle, Sidney S. | Lansingburg, New York. |
| Hogle, Sidney S. | Rockville, New York. |
| Holmes, John B. | Boston, Massachusetts. |
| Holmes, Philip B., and Wm. Pedrick | Charlestown, Massachusetts. |

## B—Continued.

| Patentees. | Residence. |
|---|---|
| Hopkins, Lansing E. | New York city. |
| Hopkins, William R. | Geneva, New York. |
| Hotchkiss, John G. | New Haven, Connecticut. |
| John A. Davenport and John W. Quincy | New York city. |
| Hotchkiss, John G. | New Haven, Connecticut. |
| John A. Davenport and John W. Quincy | New York city. |
| Houpt, John | Forkland, Alabama. |
| Howe, Abraham, and Sidney S. Grannis | Morrisville, New York. |
| Howe, Abraham, and Sidney S. Grannis | Morrisville, New York. |
| Howe, Elias, (assignee of Joseph C. Smith) | Cambridgeport, Massachusetts. |
| Howe, John I. | Derby, Connecticut. |
| Hubball, Ebenezer | Baltimore, Maryland. |
| Hubball, Ebenezer, assignee of Joseph Martin | Baltimore, Maryland. |
| Hubbard, Noadiah W. | Randolph, Ohio. |
| Hubbell—see Phleger. | |
| Hunter, David | Laurel Factory, Maryland. |
| Hunter, William W. | United States navy. |
| Benjamin Harris | Norfolk, Virginia. |
| Hurd, Joseph, jr. | Stoneham, Massachusetts. |
| Jackson, Edwin W. | Albany, New York. |
| Jayne, Zophar | Carrollton, Illinois. |
| Jenks, Otis | Albany, New York. |
| Jennings, Isaiah | New York city. |
| Jennings, Thomas Y. | Geneva, Ohio. |
| Jewett, Benjamin F. | Springfield, Illinois. |
| Johnson, Charles | Amity, Illinois. |
| Johnson, George | New York city. |
| Johnson, John | New York city. |
| Johnson, Nelson | Triangle, New York. |
| Jones, Joseph | Newton, New Jersey. |
| Jones, Orlando | City Road, England. |
| Jones, Richard | Circleville, Ohio. |
| Jones, Thomas M. | Boston, Massachusetts, residing in England. |
| Julian, William F. | Hartsville, Indiana. |
| Kaighn, Elias | Kaighn's Point, New Jersey. |
| Kennedy, Henry P. | Philadelphia, Pennsylvania. |
| Kilburn, George and John J. | Fall River, Massachusetts. |
| King, Harmon | New York city. |
| King, James | Morristown, New Jersey. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| King, James | Sapling Grove, Virginia. |
| King, John B. | Athens, Tennessee. |
| Kingsley, Nathan P. | Boston, Massachusetts. |
| Lamson, Silas | Shelburne Falls, Massachusetts. |
| Laubach, Joseph | Middletown, Pennsylvania. |
| Law, Henry | Wilmington, North Carolina. |
| Lear, Peter | Boston, Massachusetts. |
| Lee, Samuel A. | Boston, Massachusetts. |
| Lewis, Clark | Syracuse, New York. |
| Lewis, Robert B. | Hallowell, Maine. |
| Lincoln, Levi | Hartford, Connecticut. |
| Lindsey, Ichabod | Charlestown, Massachusetts. |
| Little, Samuel H. | Gettysburg, Pennsylvania. |
| Little, Samuel H. (reissue) | Gettysburg, Pennsylvania. |
| Lizé, Louis | France, now in Pittsburg, Penn. |
| Lockwood, David C. | New Windsor, New York. |
| Long, Stephen H. (reissue) | United States army. |
| Lowry, James B., | North East, Pennsylvania. |
| and Philander Eggleston | Mayville, New York. |
| Luther, Harvey | Providence, Rhode Island. |
| Luther, John | Warren, Rhode Island. |
| Mallory, Meredith | Urbana, New York. |
| Manning, Cephas | Acton, Massachusetts. |
| Manning, Nathaniel L. | Boston, Massachusets. |
| Mardock, Thomas | Liberty, Indiana. |
| Marsh, James L. and Asa Munger | Auburn, New York. |
| Martin, Joseph—see Hubball, E. | |
| Martin, Prosper | Philadelphia, Pennsylvania. |
| Mason, Belden B. | Randolph, New York. |
| and Mathews, Joslyn | Napoli, New York. |
| Mathews, E. G.—see Ruggles and others. | |
| Mayo, James C. | Columbia, Virginia. |
| McDonald, Richard | Harrisburg, Pennsylvania. |
| McEwen, William | Norristown, Pennsylvania. |
| McFarland, Carey | Barre, Massachusetts. |
| McKean, James P. | Washington, D. C. |
| McMillen, Reuben | Middleburg, Ohio. |
| McMillen, Reuben | Middleburg, Ohio. |
| McPhetridge, C. A. | Natchez, Mississippi. |
| Meschutt, James M. | New York city. |
| Miller, Ezra L. | Brooklyn, New York. |
| Miller, Lyman B. and Ellery | Wallhill, New York. |
| Mims, Marshal and Seaborn J. Mims | Starkville, Mississippi. |
| Mitchel, Enos | Pittston, Maine. |
| Moore, I. Francis | Falmouth, Virginia. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| Morris, Edmund - - - | Burlington, New Jersey. |
| Morris, William - - - | Kanawha county, Virginia. |
| Moss, Isaac M. (assignee of John Farley) - - - - | Philadelphia, Pennsylvania. |
| Mott, Jordon L. - - - | New York city. |
| Munroe, Joseph - - - | Palmer, Massachusetts. |
| Murdock, Zina K. - - - | Meriden, Connecticut. |
| Naglee, Henry M., and Thomas Raney - - - - | Philadelphia, Pennsylvania. |
| Nelson, John - - - | Jefferson, Ohio. |
| Nevins, William R. - - | New York city. |
| Newberg, George John - - | Citizen U. States, now in London. |
| Newhall, Daniel B., and Levi Wilkins, (assignees of John Dwight) | Boston, Massachusetts. |
| Newhall, Daniel B. - - | Boston, Massachusetts. |
| Nichols, Howard - - - | New Bedford, Massachusetts. |
| Nicolson, Samuel - - - | Suffolk, Massachusetts. |
| Nolt, Jonas - - - | West Hempfield, Pennsylvania. |
| Olds, Calvin - - - | Marlborough, Vermont. |
| Oliver, Samuel - - - | Northampton, Pennsylvania. |
| Orcutt, William A. - - - | Boston, Massachusetts. |
| Osborn, James P. - - - | Reddington, New Jersey. |
| Page, George - - - | Baltimore, Maryland. |
| Page, John A. - - - | Boston, Massachusetts. |
| Palmer, William B. - - | Rochester, New York. |
| Parkinson, Thomas - - | Sparta, New York. |
| Patourel, James Le - - | Chandlersville, Ohio. |
| Patterson, James H. - - | New York city. |
| Payne, Charles - - - | South Lambeth, England. |
| Payne, Elisha D. and Enos Woodruff | Newark, New Jersey. |
| Pendergast, Isaac S. - - | Barnstead, New Hampshire. |
| Pennock, Moses and Samuel - | East Marlborough, Pennsylvania. |
| Perkins, William - - - | Boston, Massachusetts. |
| Perrin, William - - - | Lowell, Massachusetts. |
| Philips, David - - - | Georgetown, Pennsylvania. |
| Philips, David - - - | Georgetown, Pennsylvania. |
| Asa Jackson - - - | Franklin Mills, Virginia. |
| Philips, David - - - | Georgetown, Pennsylvania. |
| Phillips, Henry F. - - | Skaneateles, New York. |
| Phleger, Leonard, (assignee of Wm. H. Hubbell) - - - | Philadelphia, Pennsylvania. |
| Phleger, Leonard, (assignee of Wm. H. Hubbell) - - - | Philadelphia, Pennsylvania. |
| Phleger, Leonard, (assignee of Wm. H. Hubbell) - - - | Philadelphia, Pennsylvania. |
| Phleger, Leonard, (assignee of Wm. H. Hubbell) - - - | Philadelphia, Pennsylvania. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| Pierce, Thomas - - - | Hartwick, New York. |
| Pitney, Joseph T. - - - | Auburn, New York. |
| Pitts, Hiram A. - - - | Winthrop, Maine. |
| Platt, Josiah - - - | Western, Connecticut. |
| Poole, Henry S. - - - | Boston, Massachusetts. |
| Price, John, and James T. Phillips - | Golden, Maryland. |
| Prince, John D. - - - | Lowell, Massachusetts. |
| Procter, Leonard - - - | New York city. |
| Prosser, Thomas - - - | Paterson, New Jersey. |
| Prouty, David - - - | Boston, Massachusetts. |
| and John Mears - - - | Dorcester, Massachusetts. |
| Pullman, Lewis - - - | Portland, New York. |
| Putnam, James R. - - - | New Orleans, Louisiana. |
| Quillard, Claude I. - - - | Roundout, New York. |
| Rand, John - - - - | Citizen U. States, now in England. |
| Ransom, Franklin, and Uzziah Wenman - - - - | New York city. |
| Ray, Fowler M., (reissue) - - | Catskill, New York. |
| Ray, Fowler M. - - - | Catskill, New York. |
| Read, Josiah M. - - - | Boston, Massachusetts. |
| Reading, Peirson - - - | Batavia, Ohio. |
| Reed, Jeremiah M. - - | Middlefield, New York. |
| Reed, Jesse - - - - | Marshfield, Massachusetts. |
| Richenbach, Frederick C. - - | Philadelphia, Pennsylvania. |
| Rice, Zalmun - - - | Lyons, New York. |
| Richards, William T. - - | Poultney, Vermont. |
| Richardson, Alpha - - - | Boston, Massachusetts. |
| Richardson, Elliot - - - | West River, Maryland. |
| Richman, Christian and Charles - | Philadelphia, Pennsylvania. |
| Rider, Wm. H., (assignee of Justus Rider) - - - - | Belleville, Illinois. |
| Riley, Salmon C. - - - | New York city. |
| Ring, Elihu - - - | Trumansburg, New York. |
| Robbins, Henry C. - - - | Middleborough, Massachusetts. |
| Robbins, Henry H. - - - | Middleborough, Massachusetts. |
| Robbins, Martin - - - | Hollidaysburg, Pennsylvania. |
| Roberts, Richard - - - | Manchester, England. |
| Robinson, Clark H. - - | Uniontown, Pennsylvania. |
| Robinson, Eli C. - - - | Troy, New York. |
| Robinson, Enoch, and Wm. Hall - | Boston, Massachusetts. |
| Robinson, Enoch, and Wm. Hall - | Boston, Massachusetts. |
| Robinson, Francis and Hanson - | Wilmington, Delaware. |
| Robinson, Robert - - - | Greene, New York. |
| Rocher, Michel - - - | Nantes, France. |
| Rogers, Charles B, and Edward Arnold, (assignees of Edwin M. Chaffee) - - - - | Charlestown, Massachusetts. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| Rogers, Henry - - - | Auburn, New York. |
| Rogers, Isaiah - - - | New York city. |
| Rogers, Thomas B. - - | New York city. |
| Rohrer, Jeremiah - - - | Rohrersville, Maryland. |
| Root, James - - - | Cincinnati, Ohio. |
| Ross, Samuel - - - | Camden, New Jersey. |
| Ruggles, Draper, Joel Nourse, and John C. Mason, (assignees of Elbridge G. Matthews - - | Worcester, Massachusetts. |
| Sadler, M. C. - - - | Brockport, New York. |
| Samson, Thomas - - - | Richmond, Virginia. |
| Sanderson, Charles - - - | Sheffield, England. |
| Sawyer, Henry R. - - - | New York city. |
| Sawyer, Samuel - - - | Boston, Massachusetts. |
| Schermerhorn, John F., - - | Carroll county, Indiana. |
| and Rufus Porter - | New York city. |
| Seay, Thomas - - - | Columbia county, Georgia. |
| Seely, Oran W. - - - | New York city. |
| Shaw, Joshua - - - | Philadelphia, Pennsylvania. |
| Sheldon, Samuel - - - | Cincinnati, Ohio. |
| Shepard, William A. - - | Waterville, Maine. |
| Shepherd, T.—see Carr, W. H. | |
| Shepherd, Thomas, and Thomas Loring - - - - | Philadelphia, Pennsylvania. |
| Sherwood, John P. - - | Sandy Hill, New York. |
| Sim, William - - - | Schenectady, New York. |
| Simonds, Abel, and Albert G. Page | Fitchburg, Massachusetts. |
| Slocum, Samuel - - - | Poughkeepsie, New York. |
| Smith, Christopher H. - - | Niagara, New York. |
| Smith, Francis Pettit - - | London, England. |
| Smith, Hernon - - - | Sunbury, Ohio. |
| Smith, John L. - - - | Salina, New York. |
| Smith, Joseph C.—see Howe, Elias | |
| Smith, Normand - - - | Hartford, Connecticut. |
| Smith, Thomas Briggs - - | St. Louis, Missouri. |
| Smith, Thomas W. - - | Alexandria, District of Columbia. |
| Snead, Albert - - - | Richmond, Virginia. |
| Spalding, Joel - - - | Morristown, Vermont. |
| Spaulding, Abiram - - | New York city. |
| Spaulding Samuel B. - - | Brandon, Vermont. |
| Spear, Thomas J. - - - | New Orleans, Louisiana. |
| Stadon, Shively - - - | Greenwood, Pennsylvania. |
| Stanbrough, Ira - - - | Arcadia, New York. |
| Staub, Jacob - - - | Georgetown, District of Columbia. |
| Stevens, Robert L. and Francis B. - | New York city. |
| Stewart, Matthew - - - | Philadelphia, Pennsylvania. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| Stewart, Matthew, jr. - - | Philadelphia, Pennsylvania. |
| Stewart, J. A. - - - | Cross Plains, Tennessee. |
| Stewart, Robert - - - | Michigan City, Indiana. |
| Stiles, Riverius C., & Joseph S. Graves | East Bloomfield, New York. |
| Stillman, O. M. - - - | Stonington, Connecticut. |
| St. John, John R. - - - | Cleveland, Ohio. |
| Strong, Justin E. - - - | Boston, Massachusetts. |
| Sturdevant, Lewis G. - - | Delaware, Ohio. |
| Swett, Leonard T. - - - | Canton, Connecticut. |
| Swett, Samuel, jr. - - - | Chelsea, Massachusetts. |
| Taplin, John A. - - - | Hammond, New York. |
| Tatham, Benjamin, jr. - - | Hitchen, England. |
| and Henry B. Tatham, (assignees of John and Charles Hanson) - | Philadelphia, Pennsylvania. |
| Tatham, George N., and Benjamin Tatham, jr. - - - | Philadelphia, Pennsylvania. |
| Taylor, Jesse - - - | Aurelius, New York. |
| Tentler, Aaron A. - - - | Philadelphia, Pennsylvania. |
| Thayer, Ansel - - - | Braintree, Massachusetts. |
| Thomas, John - - - | New York city. |
| Thomas, R. S. - - - | Bennettsville, South Carolina. |
| Thompson, Joel - - - | Cynthiana, Kentucky. |
| Thurman, Silas T. - - | Lincoln, Kentucky. |
| Tibbetts, John G. - - - | New York city. |
| Tillinghast, J. B. - - - | Huron, Ohio. |
| Tolles, Elisha - - - | New York city. |
| Torbet, Francis R. - - | Paterson, New Jersey. |
| Tough, John S. - - - | Baltimore, Maryland. |
| Tough, John S. - - - | Baltimore, Maryland. |
| Townsend, Ashley - - - | Leroy, New York. |
| Tracy, Andrew - - - | Poughkeepsie, New York. |
| Trumbull, Earl - - - | Little Falls, New York. |
| Turner, Daniel B. - - - | Florence, Ohio. |
| Tuttle, Jesse - - - | Boston, Massachusetts. |
| Tyler, Philos B., (executor of Rufus Tyler, deceased.) | New Orleans, Louisiana. |
| Van Allen, C. D. - - - | Petersburg, Virginia. |
| Van Hoesen, William C. - - | Catskill, New York. |
| Van Loan, William W. - - | Catskill, New York. |
| Van Osdel, John M. - - | Chicago, Illinois. |
| Van Osdel, John M. - - | Chicago, Illinois. |
| Walcott, Truman - - - | Stow, Massachusetts. |
| Wall, Arthur - - - | Shadwell, England. |
| Walter, Horatio N. - - | Norwich, New York. |
| Ward, Ezekiel G. - - | New York city. |
| Ward, Joseph H. - - - | Randolph, Ohio. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| Warner, Chapman - - | Lexington, Kentucky. |
| Warren, Edmund - - | New York city. |
| Washburn, Albert - - | Bridgewater, Massachusetts. |
| Waterman, George - - | Johnson, Rhode Island. |
| Waterman, Henry - - | Hudson, New York |
| Webb, A. V. H. - - - | New York city. |
| Webb, Constant - - - | Wallingford, Connecticut. |
| Weeks, John M. - - - | Salisbury, Vermont. |
| Wells, Henry A. - - - | New York city |
| Wells, Henry A. - - - | New York city. |
| Wells, Henry A. - - - | New York city. |
| Wells, Thomas J. - - - | New York city. |
| Wells, Thomas J. - - - | New York city. |
| Wells, Thomas J. - - - | New York city. |
| Welsh, Samuel, and Thomas Linacree - - - - | Albany, New York. |
| Wemmer, Nilson John - - | Philadelphia, Pennsylvania. |
| Wheeler, Alonzo and Wm. C. - | Chatham, New York. |
| Wheeler, William M. - - | Liberty, Missouri. |
| Whipple, Squire - - - | Utica, New York. |
| White, Lord - - - | Jeffersonville, Indiana. |
| White, Thomas - - - | Mount Pleasant, Ohio. |
| Whitehead, Jesse - - - | Manchester, Virginia. |
| Whiteley, William H. - - | Charlestown, Massachusetts. |
| Whitford, John A. - - - | Saratoga Springs, New York. |
| Whitford, John A. - - - | Saratoga Springs, New York. |
| Whitham, William - - - | Huddersfield, England. |
| Whitlock, George - - - | Crown Point, New York. |
| Whittlesey, Isaac N. - - | Vincennes, Indiana. |
| Wibirt, James S. and William - | Eden, New York. |
| Wightman, Joseph M. - - | Boston, Massachusetts. |
| Wilder, John - - - | New York city. |
| Wilkes, Samuel - - - | Darleston, Great Britain |
| Willemin, Eli - - - | Leesburg, Ohio. |
| Williams, Edward T., and Latham T. Tew - - - - | Newport, Rhode Island. |
| Williams, Erastus, and Daniel L. Huntington - - - | Norwich, Connecticut. |
| Willis Charles - - - | Chelsea, Massachusetts. |
| Wilson, George W. - - | Nashua, New Hampshire. |
| Wilson, Increase - - - | New London, Connecticut. |
| Wilson,Joseph B. - - - | Malden, Massachusetts. |
| Alfred R. Crossman - - | Huntingdon, Massachusetts. |
| Winans, Norman T., Theodore and Thaddeus Hyatt - - - | New York city. |

B—Continued.

| Patentees. | Residence. |
|---|---|
| Winans, Norman T., Theodore and Thaddeus Hyatt - - - | New York city. |
| Windship, Charles M., M. D. - | Roxbury, Massachusetts. |
| Wolpers, Charles O. - - | Cincinnati, Ohio. |
| Wood, Loftis - - - | New York city. |
| Woodward, Moses S. - - | Marshalton, Pennsylvania. |
| Worman, Andrew D. - - | Fredericktown, Maryland. |
| Wright, Mercy - - - | Tullytown, Pennsylvania. |
| Wyeth, Nathaniel J. - - | Cambridge, Massachusetts. |
| Wyeth, Nathaniel J. - - | Cambridge, Massachusetts. |
| Wyeth, Nathaniel J. - - | Cambridge, Massachusetts. |
| Yale, Linus - - - | Newport, Rhode Island. |
| Young, Edward L. - - | Norfolk, Virginia. |
| Young, James Hadden - - | England. |
| and Adrian Delcambre - - | France. |
| Zimmerman, William - - | Stephenson, Illinois. |

4

## C.

*List of patents expired in the year* 1841.

| Names of patentees. | Residence. | Inventions or discoveries. | When issued. |
|---|---|---|---|
| | | | 1827. |
| Adams, Washington | Guilford, N. C. | Grist mill | July 18 |
| Allen, Adolphus | Troy, N. Y. | Horse yoke | June 29 |
| Allen, John, jr., and Geo. O. Gevghegan | Richmond, Va. | Tobacco, manufacturing | April 3 |
| Ambler, John, jr. | S. New Berlin, N. Y. | Lock, percussion lever | October 16 |
| Ames, Oliver | Easton, Mass. | Shovels, making | March 5 |
| Amsden, Amory | Bloomfield, N. Y | Staves, making ready for truss-hoop | July 27 |
| Andrews, Samuel | Bridgetown Me. | Steelyards, lever power | March 24 |
| Aiken, John M. | Philadelphia, Pa. | Distilling | August 30 |
| Ammon, Jacob | Rockingham, Va. | Letting water on wheels | June 8 |
| Armour, Joseph M. | Fredericktown, Md. | Scurvy, composition to prevent | Septemb'r 28 |
| Bagley, Samuel L. | Hillsdale, N. Y. | Churn | March 24 |
| Bailey, Jeremiah | Philadelphia, Pa. | Tubs, machine, for making wood sides of | April 7 |
| Bailey, Jeremiah | Philadelphia, Pa. | Horse and hay rake | March 30 |
| Bailey, Jeremiah | Philadelphia, Pa. | Carpeting | April 7 |
| Bailey, Uriah | West Newbury, Me. | Inlaying gold in tortoise shell | February 22 |
| Bailey, Uriah | West Newbury, Me. | Ornamenting combs | Novemb'r 15 |
| Baker, Horace | North Salem, N. Y. | Loom for figured goods | August 30 |
| Bakewell, Thomas P. | Pittsburg, Pa. | Bridges | May 15 |
| Bakewell, Thomas W. | Cincinnati, Ohio | Building vessels, &c. | February 21 |
| Barker, John | Baltimore, Md. | Boiler for anthracite coal | February 7 |
| Barker, Peter | Worthington, Ohio | Thrashing and breaking flax | August 20 |
| Blaisdell, Samuel | Lancaster, Ohio | Balance on dearborns | October 10 |

| | | | | |
|---|---|---|---|---|
| Beach, Cyrus W. | Schoharie, N. Y. | Wheelwrights' assistant | March | 16 |
| Beach, Cyrus | Newark, N. J. | Axletrees and boxes | June | 26 |
| Beach, C. C. K. | Portland, Me. | Cutter, cant twist blade for | Novemb'r | 10 |
| Beach, William | Philadelphia, Pa. | Plough | June | 27 |
| Beard, David | Buffalo, N. Y. | Washing machine | June | 27 |
| Belknap, Ira | Millersburg, Pa. | Fermenting and distilling spirits | July | 20 |
| Bell, Robert P. | New York, N. Y. | Transporting, boats for, on canals, &c. | July | 13 |
| Benbow, Thomas | Guilford, N. C. | Straw cutter | February | 16 |
| Bencine, Anthony | Caswell, N. C. | Grist mill | January | 16 |
| Bencine, Anthony | Milton, N. C. | Saw mill | June | 4 |
| Benham, John M. | Bridgewater, N. Y. | Aqueduct | August | 29 |
| Benbow, William | Guilford county, N. C. | Grist mill | January | 19 |
| Brewster, Gilbert | Poughkeepsie, N. Y. | Roving cotton | March | 28 |
| Bigelow, Elijah A. | Brandon, Vt. | Engrafting teeth | March | 8 |
| Bishop, Nathaniel | Danbury, Ct. | Combs, rolling the backs of, &c. | Novemb'r | 17 |
| Briggs, Elisha | Perry, N. Y. | Hollow wooden ware | July | 30 |
| Baggs, John | Philadelphia, Pa. | Saw, sett spring | October | 4 |
| Bourne, Herman | Salem, Mass. | Stone, dressing, drilling, and cutting | August | 3 |
| Brooks, Theodore, and D. W. Eames | Rutland, N. Y. | Carriages | December | 26 |
| Brown, Alexander | New York, N. Y. | Escape, heat of steam, application of | October | 30 |
| Brown, John, and G. W. Robinson | Providence, R. I. | Locks | February | 20 |
| Brown, Simeon | New York, N. Y. | Removing buildings | July | 31 |
| Brownell, Thomas | New York, N. Y. | Pumping vessels by wind power | March. | 23 |
| Broyles, Cain | Tellico, Tenn. | Propelling machinery by weights | October | 19 |
| Bulkley, Chauncey | Colchester, Ct. | Hoes of cast iron | January | 10 |
| Bulkley, Chauncey | Colchester, Ct. | Hoes by rolling cast steel | January | 10 |
| Burdett, Benj. C. | New York, N. Y. | Victualler | August | 4 |
| Brundred, Benj. | Oldham, N. Y. | Spindle cotton | July | 14 |
| Brunel, Mark J. | London, England | Power by certain fluids | March | 30 |
| Byington, Benijah | Salina, N. Y. | Salt manufacture | February | 21 |
| Bryan, Elijah | New York, N. Y. | Propelling boats, &c. | December | 22 |

## LIST OF PATENTS—Continued.

| Names of patentees. | Residence. | Inventions or discoveries. | When issued. | |
|---|---|---|---|---|
| | | | 1827. | |
| Campbell, John | Winsborough, S. C. | Rice, cleaning and hulling | May | 3 |
| Campbell, Robert | Martinsburg, Va. | Homony mill | April | 9 |
| Carmichael, William | Sand Lake, N. Y. | Hoes, &c., ploughing and weeding | July | 28 |
| Carver, Isaac, jr. | Prospect, Me. | Yards of vessels, slinging | December | 11 |
| Cass, Moses | Caroline, N. Y. | Washer | July | 29 |
| Cass, Moses, and Aaron Bull | Caroline, N. Y. | Saw, two edged | August | 31 |
| Castill, Stacy | Philadelphia, Pa. | Wheel float | October | 17 |
| Chamberlain, Calvin | Amenia, N. Y. | Straw cutter and corn sheller | March | 15 |
| Clarke, Elijah H. | Damascus, Penn. | Jointing boards | January | 31 |
| Cheatham, Jonathan | Providence Inn, Va. | Hoes, harrows, and ploughs | July | 31 |
| Chesterman, Edwin | New York, N. Y. | Suspenders | June | 19 |
| Clinton, Charles | New York, N. Y. | Cement, for roofs of houses, &c. | July | 13 |
| Coke, William | Cabinpoint, Va. | Distilling | October | 30 |
| Coe, Avery and John | Guilford county, N. C. | Gristmill | July | 21 |
| Cogswell, Ormond | Cincinnati, Ohio | Tanning | Sept. | 18 |
| Collins, James | Anson, Maine | Shearing cloth | March | 6 |
| Collins, Squire | Hillsdale, N. Y. | Bogging machine | February | 22 |
| Cooper, John M. | Guildhall, Vt. | Piston, rotative | July | 16 |
| Corey, David, | New York, N. Y. | Hydraulic elevator | August | 31 |
| Cornell, William | Brooklyn, N. Y. | Liquors, determining their strength | August | 20 |
| Couillard, Samuel | Boston, Mass. | Dyeing and polishing leather | June | 27 |
| Couillard, Samuel J. | Boston, Mass. | Printing press | July | 14 |
| Couillard, Samuel J. | Boston, Mass. | Printing press | July | 14 |
| Cromwell, Simon | Edgecomb, Me. | Gun lock | February | 3 |
| Crossman, Alfred B. | Huntington, N. Y. | Brick press | February | 9 |

| | | | | |
|---|---|---|---|---|
| Crowninshield, John | Salem, Mass. | Heaving down vessels | October | 19 |
| Church, William | Birmingham, Eng. | Spinning wool and cotton | July | 11 |
| Cryer, Noble G. | Wentworth, N. C. | Plough, twin | March | 24 |
| Daley, Edmund | Baltimore, Md. | Chair | February | 9 |
| Daley, Jacob | Baltimore, Md. | Chair, repairing and finishing | February | 22 |
| Daley, Jacob | Baltimore, Md. | Shingle machine | Sept. | 27 |
| Dana, George W. | Rutland, Vt. | Shingle machine | Sept. | 20 |
| Davis, Gideon, and J. Price | Lockport, N. Y. | Team scraper, or shovel | May | 12 |
| Davis, Jos. S. | Providence, R. I. | Watch keys | April | 3 |
| Davis, Marvel | Mayville, N. Y. | Lock, percussion | July | 10 |
| Davis, S., and P. Babbett and H. P. Grunnel | Providence, R. I. | Watch seals | March | 3 |
| Delap, Abram and Avery Eve | Guilford county, N. C. | Grist mill | May | 31 |
| Dennison, James | Lancer Township, Ohio | Water wheel for saw grist mill | August | 22 |
| Dewees, John C. | Mason county, Ky. | Cotton bagging, spinning | December | 28 |
| Dezeau, William | Philadelphia, Penn. | Beer, spruce, brewing | May | 31 |
| Dixon, Jesse | Pittsborough, N. C. | Bellows | June | 11 |
| Dodge, David | Hamilton, Mass. | Oil, extracting, from flaxseed | May | 14 |
| Dolfer, George | Fredericktown, Md. | Plough, right and left | August | 20 |
| Doolittle, Isaac | Bennington, Vt. | Boiler, supplying a uniform quantity of steam for | June | 1 |
| Dummer, G., and P. C. and J. Maxwell | Jersey City, N. J. | Moulds, combination of, in forming glass | October | 16 |
| Dummer, Phineas C. | Jersey City, N. J. | Moulds for preparing glass | October | 16 |
| Durham, Laban, and J. S. Pleasants | Halifax county, Va. | Straw cutter | July | 27 |
| Dyar, Harrison G. | New York, N. Y. | Clock, wood wheel, 30 hour | Nov. | 6 |
| Edmonston Thomas | Pike Creek, Md. | Preserving butter, eggs, &c. | April | 26 |
| Embree, Davis | New Richmond, Ohio | Distilling, by using the escape steam of a steam engine | December | 3 |
| Failing, John R. | Canajoharie, N. Y. | Boring earth | June | 13 |
| Fessenden, Thomas G. | Boston, Mass. | Lamp for boiling water | January | 31 |

## LIST OF PATENTS—Contiuued.

| Names of patentees. | Residence. | Inventions or discoveries. | When issued. |
|---|---|---|---|
| | | | 1827. |
| Fleming, George | Goochland, Va. | Raising water by steam power | April 24 |
| Fisk, E., and B. Hinkley | Fayette, Me. | Brick and tile machine | Sept. 8 |
| Fitch, Edward G. | Blakely, Ala. | Lever gained power | October 5 |
| Forward, William W. | Hartford, Ct. | Grist mill | June 18 |
| Foster, Ambrose | Auburn, N. Y. | Rake, hay, hand | December 9 |
| Fuller, Elisha | Providence, R. I. | Propelling boats | March 2 |
| Fuller, R., and T. Thomas | New York, N. Y. | Blower, coal grates | May 22 |
| Gannett, S. H. | Greenville, Tenn. | Corn crusher | May 25 |
| Graham, Anson B. | Lee, Mass. | Saw mill, of Johnson's | Sept. 28 |
| Grant, Joseph | Providence, R. I. | Hat bodies, setting up, on Grant's ma. | April 10 |
| Graves, Robert | Brooklyn, N. Y. | Cordage, by machinery | July 25 |
| Graves, Robert | Brooklyn, N. Y. | Boat, passing up and down elevations on canals | July 26 |
| Green, Benjamin | Hartford, Vt. | Polishing hard and soft substances | March 27 |
| Greenleaf, Abel, and H. Amidon | Mexico, N. Y. | Mortising machine | December 28 |
| Giraud, John J. | Baltimore, Md. | Navigation, improvement in | January 31 |
| Giraud, John J. | Baltimore, Md. | Paddles, water | Septemb'r 18 |
| Griffiths, John | New York, N. Y. | Andirons, constructing feet of brass | March 15 |
| Goulding, John | Dedham. Mass. | Wool, manufacturing | April 27 |
| Goulding, John | Dedham, Mass. | Wool, manufacturing, &c. | July 10 |
| Goulding, John | Dedham, Mass. | Clothes, washing and scouring | July 12 |
| Goulding, John | Dedham, Mass. | Improvement in the composition to start the oil contained in wool | August 24 |
| Goulding, John | Dedham, Mass. | Wool, manufacturing | August 24 |
| Goulding, John | Dedham, Mass. | Shuttle, mode of throwing | August 24 |

| | | | |
|---|---|---|---|
| Goulding, John | Dedham, Mass. | Wool, &c., manufacturing | December 15 |
| Guilford, Ezra | Washington, D. C. | Water cement | January 16 |
| Hall, John H. | Harper's Ferry | Substance, metallic, machine for cutting | March 7 |
| Harris, Francis | Albany, N. Y. | Steam and rotary wheel | July 10 |
| Hart, William A. | Fredonia, N. Y. | Percussion lock | February 20 |
| Hawes, Paul | Lockport, N. Y. | Shingles, manufacturing | March 30 |
| Hedge, Samuel | Windsor, Vt. | Scales, engine for dividing | June 20 |
| Hemstead, Stephen, jr. | St. Charles county, Mo. | Hats, water-proof, stiffening of | May 26 |
| Hemstead, Stephen, jr. | St. Charles county, Mo. | Hats, water-proof, stiffening of | October 26 |
| Hilderbrand, Michael | McMinn county, Tenn. | Water wheels, letting water on | Novemb'r 10 |
| Hill, Benjamin, K. | Richmond county, Geo. | Bricks, machine for mixing earth for | February 17 |
| Hill, Solomon | New Milford, Ct. | Burning lime and brick, and boiling kettles | February 12 |
| Hills, Luther | Boston, Mass. | Cork cutter | June 18 |
| Hoard, George A. | Antwerp, N. Y. | Shingle machine, improvement on Hawes's | Septemb'r 20 |
| Holcomb, Allen | Butternuts, N. Y. | Paint mill | May 14 |
| Howe, John | Alna, Me. | Brick press | May 18 |
| Hoyt, L., and E. Pierce | Poultney, N. Y. | Blowing and striking for blacksmiths | March 3 |
| Hunt, Walter | New York, N. Y. | Alarm for coaches | July 30 |
| Hutchinson, Benjamin | Philadelphia, Pa. | Bobbin, tube for spinning cotton | October 18 |
| James Walter | Ashford, Ct. | Tire, bending | July 14 |
| Jeans, Abel | Mill Creek hundred, Del. | Lime kiln | February 15 |
| Jenks, A., and J. Clewell | Holmesburg, Pa. | Temples, spring | March 19 |
| Jenks, Eb. | Colebrook, Ct. | Paddles, folding boat | June 13 |
| Jernigan, Richard | Waynesburg, N. C. | Cotton press | May 15 |
| Jessup, William and Josiah | Guilford county, N. C. | Carriages | June 1 |
| Jones, Samuel J. | Philadelphia, Pa. | Charring wood for procuring gases | January 17 |
| Jones, Thomas P. | Newcastle, Del. | Wind mill, horizontal | February 16 |
| Jones, William | Thornville, Ohio | Spinner, family | July 27 |
| Judson, Alfred | Sweden, N. Y. | Steam boiler pump | February 24 |
| Kendall, William, jr. | Waterville, Me. | Saw mill, reciprocating, for sawing timber | Novemb'r 23 |
| Kendall, William | Waterville, Me. | Saw mill, reciprocating | December 31 |

## LIST OF PATENTS—Continued.

| Names of patentees. | Residence. | Inventions or discoveries. | When issued. |
|---|---|---|---|
| | | | 1827. |
| Kelsey, Franklin | Middletown, Ct. | Washing machine | Septemb'r 28 |
| Kiser, David | New York, N. Y. | Leather, water-proof, making | Novemb'r 19 |
| Knowles, Hazard | Colchester, Ct. | Stocks, cast iron plane | August 24 |
| Lamb, Joshua | Leicester, Mass. | Teeth, cutting card | August 1 |
| Lapham, Benjamin | Queensbury, N. Y. | Spinner for wool | June 29 |
| Lawing, S., and J. Monteith | Statesville, N. C. | Grist mill, improvement on Mendenhall's | June 11 |
| Leonard, William B. | Fishkill, N. Y. | Loom, power | May 23 |
| Leonard, William B. | Fishkill, N. Y. | Loom, power, by taking up cloth uniformly | May 23 |
| Le Roy, Simon | Mexico, N. Y. | Mortising machine | July 10 |
| Lesley, David | New York, N. Y. | Frame chain | Novemb'r 19 |
| Lester, Ebenezer A. | Boston, Mass. | Boiler, steam, constructing of | May 14 |
| Lester, Ebenezer A. | Boston, Mass. | Engines, constructing of | May 14 |
| Lond, Thomas, jr. | Philadelphia, Pa. | Pianos, horizontal | May 15 |
| Lowry, James B. | Mayville, N. Y. | Lock, percussion magazine | Septemb'r 11 |
| Lupton, John | Virginia | Plough, angular | July 31 |
| Lusk, James | Butler county, Ohio | Distilling | Decemb'r 22 |
| Lyman, Benjamin | Manchester, Ct. | Hubs, cast iron | Novemb'r 6 |
| Macdonald, James | New York, N. Y. | Brick press and moulding | April 24 |
| Mann, E., and G. Hill | Rochester, N. Y. | Brick frame, portable, for raising | July 21 |
| Mason, David H. | Philadelpnia, Pa. | Biting figures on steel cylinders for printing calicoes | October 30 |
| Mathey, Lewis | Brooklyn, N. Y. | Composition, marble, granite, &c. | March 7 |
| Mayhew, Truman F. | Boston, Mass. | Hats, bowing, gearing of cones for | August 22 |
| Maynard, John | Ovid, N. Y. | Steam engine | June 15 |
| McAllister, A. S., and John Iggett | Salem, N. Y. | Rooms, warming | December 15 |

| | | | | |
|---|---|---|---|---|
| McClintie, John | Chambersburg, Pa. | Paper machine trimming | March | 31 |
| McClintie, John | Chambersburg, Pa. | Mortising and tenoning timber | October | 8 |
| McConaughey, William | New Garden, Pa. | Harrow teeth | February | 16 |
| McCulloch, Robert and Thomas | Albemarle county, Va. | Water power, apparatus to wheels | May | 26 |
| McDonald, John | New York, N. Y. | Fur, separating hair from | Septemb'r | 11 |
| McGregor, Malcomb | New York, N. Y. | Still | June | 15 |
| McIntosh, William J. | Georgia | Cane juice, clarifying | March | 7 |
| Metcalf, Silas | Wilmington, Vt. | Chisel, bearded mortising machine | January | 17 |
| Miller, Henry | Allenstown, Pa. | Water, raising by a revolving wheel | July | 28 |
| Miner, Charles | Lynn, Ct. | Raising ships, &c., by cradle screw | October | 12 |
| Miner, Charles | Lynn, Ct. | Raising ships, &c., by cradle screw | Novemb'r | 16 |
| Moore, Sidney and Porteus | Mount Tirzah, N. C. | Mill, sugar-loaf and grist | June | 15 |
| Moorehouse, Samuel | Eastport, Me. | Boot crimper | June | 19 |
| Morgan, Richard P. | Stockbridge, Mass. | Railway carriage | July | 27 |
| Morse, John G. | Randolph county, N. C. | Grist mill, crusher and sheller | March | 20 |
| Murphy, Bird | Union district, S. C. | Plough for planting corn | December | 31 |
| Mussey, Thomas | New London, Ct. | Boxes, self-fastening | June | 11 |
| Myerle, David | Philadelphia, Pa. | Rope layer, called the jack and breast work | March | 3 |
| Neer, Charles | Waterford, N. Y. | Spur for bevil gearing | March | 9 |
| Newman, Thomas | Guilford county, N. C. | Grist mill | February | 6 |
| Newman, Thomas | Guilford county, N. C. | Corn sheller | February | 7 |
| Newton, S. | Washington, D. C. | Spectacles and single eye glasses | December | 22 |
| Norton, Lewis M. | Litchfield, Ct. | Cheese nets | June | 4 |
| Nott, Eliphalet | Schenectady, N. Y. | Heat, evolution and management of | May | 30 |
| Nourse, Samuel | Danvers, Mass. | Boots or shoes, mode of holding | December | 8 |
| Olmstead, Dennison | New Haven, Ct. | Gas light from cotton seed | July | 21 |
| Overman, Benjamin | Greenbury, N. C. | Grist mill | Septemb'r | 28 |
| Overman, Benjamin | Greenbury, N. C. | Saw mill | December | 11 |
| Packard, Origen | Wilmington, Vt. | Paint mill, horizontal cast iron | February | 12 |
| Packard, Origen | Wilmington, Vt. | Water gates, opening and shutting | February | 12 |
| Paine, H. E., and S. H Russell | Le Roy, Ohio | Apple mill | March | 5 |

## LIST OF PATENTS—Continued.

| Names of patentees. | Residence. | Inventions or discoveries. | When issued. |
|---|---|---|---|
| | | | 1827. |
| Patrick, William | Leverett, Mass. | Turning lathe | April 24 |
| Pratt, Abijah | Jackson, N. Y. | Stumps, machine for raising | August 17 |
| Penniman, John R. | Boston, Mass. | Sofa and bedstead united | August 22 |
| Pennock, M. and S. | East Marlborough, Pa. | Rake, hay and grain | February 17 |
| Pennock, Moses | Kennett's Square, Pa. | Thrashing machine, vibrating | May 26 |
| Petre, Michael | Womelsdoff, Pa. | Fur, machine for cutting | December 20 |
| Phelps, Oliver | Lansing, N. Y. | Earth from canals, hauling | July 16 |
| Pierce, E., and J. Hathaway | Pultney, Vt. | Hammer, foot trip | October 19 |
| Pierson, Jeremiah H. | Ramapo Works, N. Y. | Hoop and sheet iron manufactory | December 24 |
| Pike, Ebenezer B. | Litchfield, Me. | Thrashing machine | October 5 |
| Pinistre, Salvadore | New York, N. Y. | Schagliola shining | June 18 |
| Phillip, John G. | Kinderhook, N. Y. | Churn, rocking | February 15 |
| Price, Jeremiah | Lockport, N. Y. | Carts for removing earth | May 18 |
| Poiteaux, Michael B. | Richmond, Va. | Ovens, heating rooms, &c. | January 17 |
| Pool, John | Sheffield, England | Boilers for steam engines | May 14 |
| Potes, Henly | Christianburg, Va. | Water gate for penstocks or flumes | January 9 |
| Powles, Daniel | Baltimore, Md. | Bedsteads, sacking bottoms, &c. | January 26 |
| Pugh, Eli | Chatham county, Ct. | Plough, bar share | December 24 |
| Putnam, Joseph | Salem, Mass. | Pipes, tubes, &c. | January 17 |
| Rawlings, George | Philadelphia, Pa. | Cork cutting machine | October 30 |
| Reed, Charles B. | W. Bridgewater, Mass. | Stone, hewing and hammering | June 27 |
| Reed, Jesse | Marshfield, Mass. | Cotton cleaner, sea island | August 10 |
| Reihm, Josiah | Savage Factory, Md. | Planning machine | Novemb'r 1 |
| Reilly, James, and John Flanagan | Waynesborough, Pa. | Chimneys, crank and wheel dampers for | March 10 |
| Remington, Nathaniel | Geneva, N. Y. | Spinning machine | April 21 |

| | | | | |
|---|---|---|---|---|
| Reynolds, Jonathan | Amenia, N. Y. | Mill, horizontal | March | 15 |
| Rice, Benjamin | Denmark, N. Y. | Washing clothes and shelling corn | Novemb'r | 23 |
| Rice, Lewis | Clarksborough, N. J. | Sack shoulderer | August | 3 |
| Rising, David | Atchester, Vt. | Brick machine | March | 21 |
| Robinson, George W. | New York, N. Y. | Stove, cast iron foot | June | 2 |
| Robinson, James | Buckskin township, O. | Grist mill | December | 14 |
| Robinson, John | Pittsburg, Pa. | Glass knobs, dressed at one operation | October | 6 |
| Rosencrans, Levi | Urbanna, N. Y. | Churn | May | 19 |
| Roup, Jacob | Kenhawa, Va. | Hydraulic machine | October | 6 |
| Rowen, John H., and H. Wise | Fredericktown, Pa. | Tubs of clay, machine for making | May | 10 |
| Rhodes, Ryland | Charlottesville, Va. | Plough | February | 20 |
| Russell, Herman | Litchfield, Me. | Plough for planting corn | January | 16 |
| Shattuck, Joseph | Jefferson county, Ohio | Lock, percussion | Novemb'r | 10 |
| Spafford, Jacob | Ipswich, Mass. | Saw mill | June | 23 |
| Spain, Edward | Mount Holly, N. J. | Churn | April | 23 |
| Sparrow, Jonathan | Portland, Me. | Plane, turner, sliding | December | 26 |
| Stancliffe, Benjamin | Philadelphia, Pa. | Cock for hydrants, valve | May | 15 |
| Stanton, William | Centre township, Pa. | Propelling machinery of all kinds | April | 23 |
| Seely, Jos. C. | Dutchess county, N. Y. | Hatters' cards, or jacks, making | March | 15 |
| Seymour, Francis | Plymouth, Mass. | Sheaves, cast-iron, for shipping | December | 29 |
| Schreiner, J. H. | Philadelphia, Pa. | Safety-valve, chimney smoke, &c. | July | 31 |
| Sheldon, Daniel | Pultney, Vt. | Churn | Septemb'r | 13 |
| Shepherdson, William | Hamilton, N. Y. | Turning rake and hoe handles | December | 3 |
| Sperry, Josiah C. | Camden, N. Y. | | | |
| Spedden, Robert | Talbot, Md. | Tide mill | August | 1 |
| Sperry, Anson | Rotterdam, N. Y. | Turning rake and hoe handles | December | 26 |
| Sperry, David | Colchester, Ct. | Boring and tenoning machine | February | 18 |
| Stephens, Robert L. | Hoboken, N. J. | Water-wheel for steamboats | April | 10 |
| Sheeler, J. H., and J. S. Wilbert | Chili, N. Y. | Mortar machine and grinding apples | June | 12 |
| Sweenny, Robert | Warren county, Ohio | Plough, cast-iron | May | 18 |
| Sweet, J. W., and W. Stedman | Berkshire, Mass. | Turning tenons for rake-teeth | March | 5 |

## LIST OF PATENTS—Continued.

| Names of patentees. | esidence. | Inventions or discoveries. | When issued. |
|---|---|---|---|
| | | | 1827. |
| Silliman, Levi | Albany, N. Y. | Steam, generating | January 19 |
| Simpson, John R. | Boston, Mass. | Sacking, mode of tightening bed | July 10 |
| Sitton, John | Pendleton, S. C. | Wheelwrights' assistant | February 15 |
| Skinner, Elijah | Sandwich, N. H. | Water wheel, screw | Septemb'r 11 |
| Smith, Judson | Derby, Ct. | Auger, screw | July 13 |
| Swift, Nathan | Lebanon, Ct. | Shingle-sawing machine | April 27 |
| Schoonhoven, Henry | Pultney, N. Y. | Flax dressing | December 11 |
| Sholtz, J. G. | Rockaway township, O. | Spindles, preventing friction on | July 6 |
| Stone, Chester | Middleburg, Ct. | Washing machine | February 17 |
| Storm, Samuel | New York, N. Y. | Hides, protecting against moths | February 17 |
| Shute, James D. | Boston, Mass. | Spring stiffener for vests | December 5 |
| Shute, Thomas | Tennessee | Water-wheels for saw mill | March 6 |
| Sturdevant, John, and E. Starr | Boston, Mass. | Type caster, mechanical | October 23 |
| Syms, John | New York, N. Y. | Moccasins, water-proof | November 14 |
| Smylie, Edmund | New York, N. Y. | Andirons, pedestal | February 1 |
| Smylie, Edmund | New York, N. Y. | Andirons, repairing and finishing | February 22 |
| Taylor, Nathan | Urbana, N. Y. | Bush for mill-stone | July 23 |
| Trask, Edward | Saugerties, N. Y. | Sleigh shoes, cast iron | October 6 |
| Trembly, Benjamin | New York, N. Y. | Cement, imitation of marble | November 13 |
| Tilton, John | Newtown, Ct. | Carding machine | September 8 |
| Torrey, William | Westbrook, Me. | Mill, bark, cast iron | September 13 |
| Thomas, Robert S. | Rockingham, N. C. | Grist mill | June 4 |
| Thomas, William | Richmond county, N. C. | Cotton, packing | February 15 |
| Thorp, Thomas | — — | Boot, constructing | August 31 |
| Turner, William A. | Plymouth, N. C. | Grist mill | June 27 |

| | | | | |
|---|---|---|---|---|
| Tyler, John | Claremont, N. H. | Grain, cleaning | May | 11 |
| Tyson, Isaac | Baltimore, Md. | Copperas, making | February | 15 |
| Valentine, Ab. S. | Bellefonte, Pa. | Rolling iron | June | 3 |
| Van Dorn and Jacob Glenn | New York, N. Y. | Gate, safety, for canals | May | 14 |
| Van Horn, Ab. L. | Philadelphia, Pa. | Suspenders, manufacturing | February | 22 |
| Wales, Hiram | Randolph, Mass. | Stove, air funnel | May | 18 |
| Walker, Enoch | Springfield, Pa. | Fanning mill | September | 20 |
| Walters, Jac. F. | Philadelphia, Pa. | Culinary fixtures for anthracite coal | June | 8 |
| Ward, Minus | Baltimore, Md. | Gas and heated air in aid of the power | May | 15 |
| Waring, George E. | Poundridge, N. Y. | Corn sheller, longitudinal | March | 16 |
| Warren, Edmund | New York, N. Y. | Thrashing and winnowing and flax-breaking machine | August | 11 |
| Watson, Cornelius | Addison township, O. | Tread-wheel | December | 22 |
| Webb, Joseph | New York, N. Y. | Railway, marine | May | 14 |
| Weeks, Constant | Paris, N. Y. | Apples, machine for grinding | April | 9 |
| West, Charles E. | Colchester, Ct. | Irons for planes or jointers | January | 10 |
| Westerfield, David | New York, N. Y. | Cooking apparatus | March | 24 |
| Wheeler, Oliver | Rochester, N. Y. | Shingles, manufacture of | November | 10 |
| Wiberts, J. S. | Chili, N. Y. | Bellows | June | 12 |
| Wiggins, Cuthbert | Fayette, Pa. | Beehive | February | 27 |
| Wilcox, John D. | Corydon, Ind. | Water-wheel | June | 7 |
| Wilder, Elijah | Jersey City, N. J. | Rice, machine for cleaning, and cleaning coffee | November | 6 |
| Wilkinson, Garner | White creek, N. Y. | Bridges with draws | May | 5 |
| Willis, Richard | West Point, N. Y. | Bugle, Kent | November | 10 |
| Wilson, Henry | Pomfield, N. Y. | Spinner, Brown's vertical | July | 13 |
| Wilson, James G. | New York, N. Y. | Square for cutting garments | February | 28 |
| Wilson, Joseph | Marlborough, N. H. | Hoes, pronged | September | 20 |
| Wilson, Thomas D. | Corydon, Ind. | Cotton and hay press | June | 6 |
| Wing, Warren P. | Greenwich village, Mass. | Steam engine | August | 17 |
| White, Ira | Newburg, Vt. | Paper finishing | February | 28 |

## LIST OF PATENTS—Continued.

| Names of patentees. | Residence. | Inventions or discoveries. | When issued. |
|---|---|---|---|
| | | | 1827. |
| White, Philemon | Chatham county, N. C. | Cotton press | February 19 |
| Whitney, Nathan | Augusta, Me. | Churn | May 7 |
| Wood, Jesse, and P. A. Sabalan | New York, N. Y. | Railway, marine | October 6 |
| Woodmansee, William | Kingston, N. Y. | Bridges | March 6 |

## D.

*Statement of receipts, caveats, disclaimers, improvements, and certified copies of papers, in the year* 1841.

| | | |
|---|---|---|
| Amount received for patents, caveats, &c. | $39,640 50 | |
| Amount received for office fees | 772 51 | |
| | | $40,413 01 |
| Deduct repaid on withdrawals | – | 9,093 30 |
| | | 31,319 71 |

## E.

*Statement of expenditures and payments made from the patent fund by H. L. Ellsworth, Commissioner, from the* 1*st of January to the* 31*st of December*, 1841, *inclusive, under the act of March* 3, 1839.

| | | |
|---|---|---|
| For salaries | $15,982 41 | |
| For contingent expenses | 4,346 04 | |
| For library | 44 00 | |
| For temporary clerks | 2,443 42 | |
| For agricultural statistics and seeds | 125 00 | |
| For compensation to chief justice of the District of Columbia | 125 00 | |
| | | 23,065 87 |
| Leaving a nett balance to the credit of the patent fund | – | 8,253 84 |

## F.

*Expenditures under the act of* 3*d of March*, 1837, *for restoring the loss by fire in* 1836.

| | |
|---|---|
| For draughtsmen | $8,326 10 |
| For examiner and register | 1,500 00 |
| For restoring the records of patents | 156 00 |
| For restored drawings | 112 00 |
| For restored models and cases for ditto | 9,665 60 |
| For freight of models | 458 00 |
| For stationery | 290 00 |
| | 20,507 70 |

Patent Office, *January*, 1842.

H. L. ELLSWORTH.

## G.

Table I.—*Agricultural statistics, as estimated for* 1841.

| | States, &c. | Population according to the census of 1840. | Present population, estimated on the annual average incr'se for 10 years. | Number of bushels of wheat. | Number of bushels of barley. | Number of bushels of oats. | Number of bushels of rye. | Number of bushels of buckwheat. | Number of bushels of Indian corn. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Maine | 501,973 | 522,059 | 987,412 | 360,267 | 1,119,425 | 143,458 | 53,020 | 988,549 |
| 2 | New Hampshire | 284,574 | 286,622 | 426,816 | 125,964 | 1,312,127 | 317,418 | 106,301 | 191,275 |
| 3 | Massachusetts | 737,699 | 762,257 | 189,571 | 157,903 | 1,276,491 | 509,205 | 91,273 | 1,905,273 |
| 4 | Rhode Island | 108,830 | 111,156 | 3,407 | 69,139 | 188,668 | 37,973 | 3,276 | 471,022 |
| 5 | Connecticut | 309,978 | 312,440 | 95,090 | 31,594 | 1,431,454 | 805,222 | 334,008 | 1,521,191 |
| 6 | Vermont | 291,948 | 293,906 | 512,461 | 55,243 | 2,601,425 | 241,061 | 231,122 | 1,167,219 |
| 7 | New York | 2,428,921 | 2,531,003 | 12,309,041 | 2,301,041 | 21,896,205 | 2,723,241 | 2,325,911 | 11,441,256 |
| 8 | New Jersey | 373,306 | 383,802 | 919,043 | 13,009 | 3,745,061 | 1,908,984 | 1,007,340 | 5,134,366 |
| 9 | Pennsylvania | 1,724,033 | 1,799,193 | 12,872,219 | 203,858 | 20,872,591 | 6,942,643 | 2,485,132 | 14,969,472 |
| 10 | Delaware | 78,085 | 78,351 | 317,105 | 5,119 | 937,105 | 35,162 | 13,127 | 2,164,507 |
| 11 | Maryland | 470,019 | 474,613 | 3,747,652 | 3,773 | 2,827,365 | 671,420 | 80,966 | 6,998,124 |
| 12 | Virginia | 1,239,797 | 1,245,475 | 10,010,105 | 83,025 | 12,962,108 | 1,317,574 | 297,109 | 33,987,255 |
| 13 | North Carolina | 753,419 | 756,505 | 2,183,026 | 4,208 | 3,832,729 | 256,765 | 18,469 | 24,116,253 |
| 14 | South Carolina | 594,398 | 597,040 | 963,162 | 3,794 | 1,374,562 | 49,064 | 85 | 14,987,474 |
| 15 | Georgia | 691,392 | 716,506 | 1,991,162 | 12,897 | 1,525,623 | 64,723 | 542 | 21,749,227 |
| 16 | Alabama | 590,756 | 646,996 | 869,554 | 7,941 | 1,476,670 | 55,558 | 60 | 21,594,354 |
| 17 | Mississippi | 375,651 | 443,457 | 305,091 | 1,784 | 697,235 | 11,978 | 69 | 5,985,724 |
| 18 | Louisiana | 352,411 | 379,967 | 67 | – | 109,425 | 1,897 | – | 6,224,147 |
| 19 | Tennessee | 829,210 | 858,670 | 4,873,584 | 5,197 | 7,457,818 | 322,579 | 19,145 | 46,285,359 |
| 20 | Kentucky | 779,828 | 798,210 | 4,096,113 | 16,860 | 6,825,974 | 1,652,108 | 9,669 | 40,787,120 |
| 21 | Ohio | 1,519,467 | 1,647,779 | 17,979,647 | 245,905 | 15,995,112 | 854,191 | 666,541 | 35,452,161 |
| 22 | Indiana | 685,866 | 754,232 | 5,282,864 | 33,618 | 6,606,086 | 162,026 | 56,371 | 33,195,108 |
| 23 | Illinois | 476,183 | 584,917 | 4,026,187 | 102,926 | 6,964,410 | 114,656 | 69,549 | 23,424,474 |
| 24 | Missouri | 383,102 | 432,350 | 1,110,542 | 11,515 | 2,580,641 | 72,144 | 17,135 | 19,725,146 |
| 25 | Arkansas | 97,574 | 111,010 | 2,132,030 | 950 | 236,941 | 7,772 | 110 | 6,039,450 |
| 26 | Michigan | 212,267 | 248,331 | 2,896,721 | 151,263 | 2,915,102 | 42,306 | 127,504 | 3,058,290 |
| 27 | Florida Ter. | 54,477 | 58,425 | 624 | 50 | 13,561 | 320 | – | 694,205 |
| 28 | Wiskonsan Ter. | 30,945 | 37,133 | 297,541 | 14,529 | 511,527 | 2,342 | 13,525 | 521,244 |
| 29 | Iowa Ter. | 43,112 | 51,834 | 234,115 | 1,342 | 301,498 | 4,675 | 7,873 | 1,547,215 |
| 30 | Dist. of Columbia | 43,712 | 46,978 | 10,105 | 317 | 12,694 | 5,009 | 312 | 43,725 |
| | | 17,069,453 | 17,835,217 | 91,642,957 | 5,024,731 | 130,607,623 | 19,333,474 | 7,953,544 | 387,380,185 |

## G—Table I—Continued.

| | States, &c. | Number of bushels of potatoes. | Number of tons of hay. | Number of tons of flax and hemp. | Number of pounds of tobacco gathered. | Number of pounds of cotton. | Number of pounds of rice. | No. of lbs. of silk cocoons. | Number of pounds of sugar. | Number of gallons of wine. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Maine - | 10,912,821 | 713,285 | 40 | 75 | - | - | 527 | 263,592 | 2,349 |
| 2 | New Hampshire | 6,573,405 | 505,217 | 28 | 264 | - | - | 692 | 169,519 | 104 |
| 3 | Massachusetts - | 4,947,805 | 617,663 | 9 | 87,955 | - | - | 198,432 | 496,341 | 207 |
| 4 | Rhode Island - | 1,003,170 | 69,881 | ½ | 454 | - | - | 745 | 55 | 801 |
| 5 | Connecticut - | 3,002,142 | 497,204 | 45 | 547,694 | - | - | 93,611 | 56,372 | 1,924 |
| 6 | Vermont - | 9,112,008 | 924,379 | 31 | 710 | - | - | 5,684 | 5,119,264 | 109 |
| 7 | New York - | 30,617,009 | 3,472,118 | 1,508 | 984 | - | - | 3,425 | 11,102,070 | 5,162 |
| 8 | New Jersey - | 2,486,482 | 401,833 | 2,197 | 2,566 | - | - | 3,116 | 67 | 9,311 |
| 9 | Pennsylvania - | 9,747,343 | 2,004,162 | 2,987 | 415,908 | - | - | 17,324 | 2,894,016 | 16,115 |
| 10 | Delaware - | 213,090 | 25,007 | 54 | 365 | 352 | - | 2,963 | - | 296 |
| 11 | Maryland - | 827,363 | 87,351 | 507 | 26,152,810 | 5,484 | - | 5,677 | 39,892 | 7,763 |
| 12 | Virginia - | 2,889,265 | 367,602 | 26,141 | 79,450,192 | 2,402,117 | 3,084 | 5,341 | 1,557,206 | 13,504 |
| 13 | North Carolina | 3,131,086 | 111,571 | 10,705 | 20,026,830 | 34,437,581 | 3,324,132 | 4,929 | 8,924 | 31,572 |
| 14 | South Carolina | 2,713,425 | 25,729 | - | 69,524 | 43,927,171 | 66,897,244 | 4,792 | 31,461 | 671 |
| 15 | Georgia - | 1,644,235 | 17,507 | 13 | 175,411 | 116,514,211 | 13,417,209 | 5,185 | 357,611 | 8,117 |
| 16 | Alabama - | 1,793,773 | 15,353 | 7 | 286,976 | 84,854,118 | 156,469 | 4,902 | 10,650 | 354 |
| 17 | Mississippi - | 1,705,461 | 604 | 21 | 155,307 | 148,504,395 | 861,711 | 158 | 127 | 17 |
| 18 | Louisiana - | 872,563 | 26,711 | - | 129,517 | 112,511,263 | 3,765,541 | 881 | 88,189,315 | 2,911 |
| 19 | Tennessee - | 2,018,632 | 33,106 | 3,724 | 35,168,040 | 20,872,433 | 8,455 | 5,724 | 275,557 | 692 |
| 20 | Kentucky - | 1,279,519 | 90,360 | 8,827 | 56,678,674 | 607,456 | 16,848 | 3,405 | 1,409,172 | 2,261 |
| 21 | Ohio - | 6,004,183 | 1,112,651 | 9,584 | 6,486,164 | - | - | 6,278 | 7,109,423 | 11,122 |
| 22 | Indiana - | 1,830,952 | 1,213,634 | 9,110 | 2,375,365 | 165 | - | 495 | 3,914,184 | 10,778 |
| 23 | Illinois - | 2,633,156 | 214,411 | 2,143 | 863,623 | 196,231 | 598 | 2,345 | 415,756 | 616 |
| 24 | Missouri - | 815,259 | 57,204 | 20,547 | 10,749,454 | 132,109 | 65 | 169 | 327,165 | 27 |
| 25 | Arkansas - | 367,010 | 695 | 1,545 | 185,548 | 7,038,186 | 5,987 | 171 | 2,147 | |
| 26 | Michigan - | 2,911,507 | 141,525 | 944 | 2,249 | - | - | 984 | 1,894,372 | |
| 27 | Florida Ter. - | 271,105 | 1,045 | 2¼ | 74,963 | 6,009,201 | 495,625 | 376 | 269,146 | |
| 28 | Wiskonsan Ter. | 454,819 | 35,603 | 3 | 311 | - | - | 25 | 147,816 | |
| 29 | Iowa Ter. - | 261,306 | 19,745 | 459 | 9,616 | - | - | - | 51,425 | |
| 30 | Dist. Columbia | 43,725 | 1,449 | - | 59,578 | - | - | 916 | - | 32 |
| | | 113,183,619 | 12,804,705 | 101,181¾ | 240,187,118 | 578,008,473 | 88,952,968 | 379,272 | 126,164,644 | 125,715 |

## G—Continued.

TABLE II.—*Census statistics of various articles for* 1839, *not embraced in Table I.*

| | States, &c. | Pounds of wool. | Pounds of hops. | Pounds of wax. | LIVE STOCK. | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Horses and mules. | Neat cattle. | Sheep. | Swine. |
| 1 | Maine - - - | 1,465,551 | 36,940 | 3,723½ | 59,208 | 327,255 | 649,264 | 117,386 |
| 2 | New Hampshire - - | 1,260,517 | 243,425 | 1,345 | 43,892 | 275,562 | 617,390 | 121,671 |
| 3 | Massachusetts - - - | 941,906 | 254,795 | 1,196 | 61,484 | 282,574 | 378,226 | 143,221 |
| 4 | Rhode Island - - - | 183,830 | 113 | 165 | 8,024 | 36,891 | 90,146 | 30,659 |
| 5 | Connecticut - - - | 889,870 | 4,573 | 3,897 | 34,650 | 238,650 | 403,462 | 131,961 |
| 6 | Vermont - - - | 3,699,235 | 48,137 | 4,660 | 62,402 | 384,341 | 1,681,819 | 203,800 |
| 7 | New York - - - | 9,845,295 | 447,250 | 52,795 | 474,543 | 1,911,244 | 5,118,777 | 1,900,065 |
| 8 | New Jersey - - - | 397,207 | 4,531 | 10,061 | 70,502 | 220,202 | 219,285 | 261,443 |
| 9 | Pennsylvania - - - | 3,048,564 | 49,481 | 33,107 | 365,129 | 1,172,665 | 1,767,620 | 1,503,964 |
| 10 | Delaware - - - | 64,404 | 746 | 1,088 | 14,421 | 53,883 | 39,247 | 74,228 |
| 11 | Maryland - - - | 488,201 | 2,357 | 3,674 | 92,220 | 225,714 | 257,922 | 416,943 |
| 12 | Virginia - - - | 2,538,374 | 10,597 | 65,020 | 326,438 | 1,024,148 | 1,293,772 | 1,992,155 |
| 13 | North Carolina - - | 625,044 | 1,063 | 118,923 | 166,608 | 617,371 | 538,279 | 1,649,716 |
| 14 | South Carolina - - | 299,170 | 93 | 15,857 | 129,921 | 572,608 | 232,981 | 878,532 |
| 15 | Georgia - - - | 371,303 | 773 | 19,799 | 157,540 | 884,414 | 267,107 | 1,457,755 |
| 16 | Alabama - - - | 220,353 | 825 | 25,226 | 143,147 | 668,018 | 163,243 | 1,423,873 |
| 17 | Mississippi - - - | 175,196 | 154 | 6,835 | 109,227 | 623,197 | 128,367 | 1,001,209 |
| 18 | Louisiana - - - | 49,283 | 115 | 1,012 | 99,888 | 381,248 | 98,072 | 323,220 |
| 19 | Tennessee - - - | 1,060,332 | 850 | 50,907 | 341,409 | 822 851 | 741,593 | 2,926,607 |
| 20 | Kentucky - - - | 1,786,847 | 742 | 38,445 | 395,853 | 787,098 | 1,008,240 | 2,310,533 |
| 21 | Ohio - - - | 3,685,315 | 62,195 | 38,950 | 430,527 | 1,217,874 | 2,028,401 | 2,099,746 |
| 22 | Indiana - - - | 1,237,919 | 38,591 | 30,647 | 241,036 | 619,980 | 675,982 | 1,623,608 |
| 23 | Illinois - - - | 650,007 | 17,742 | 29,173 | 199,235 | 626,274 | 395,672 | 1,495,254 |
| 24 | Missouri - - - | 562,265 | 789 | 56,461 | 196,032 | 433,875 | 348,018 | 1,271,161 |
| 25 | Arkansas - - - | 64,943 | – | 7,079 | 51,472 | 188,786 | 42,151 | 393,058 |
| 26 | Michigan - - - | 153,375 | 11,381 | 4,533 | 30,144 | 185,190 | 99,618 | 295,890 |
| 27 | Florida Territory - - | 7,285 | – | 75 | 12,043 | 118,081 | 7,198 | 92,680 |
| 28 | Wiskonsan Territory - - | 6,777 | 133 | 1,474 | 5,735 | 30,269 | 3,462 | 51,383 |
| 29 | Iowa Territory - - - | 23,039 | 83 | 2,132 | 10,794 | 38,049 | 15,354 | 104,899 |
| 30 | District of Columbia - - | 707 | 28 | 44 | 2,145 | 3,274 | 706 | 4,673 |
| | | 35,802,114 | 1,238,502 | 628,303½ | 4,335,669 | 14,971,586 | 19,311,374 | 26,301,293 |

## G—Table II—Continued.

| | States, &c. | LIVE STOCK. | | | | GARDENS. | | NURSERIES. | |
|---|---|---|---|---|---|---|---|---|---|
| | | Poultry of all kinds, estimated value. | Value of the products of the dairy. | Value of the products of the orchard. | Value of home made or family goods. | Value of produce of market gardeners. | Value of produce of nurseries & florists. | Number of men employed. | Capital invested. |
| 1 | Maine - - | $123,171 | $1,496,902 | $149,384 | $804,397 | $51,579 | $460 | 689 | $84,774 |
| 2 | New Hampshire - | 107,092 | 1,638,543 | 239,979 | 538,303 | 18,085 | 35 | 21 | 1,460 |
| 3 | Massachusetts - | 178,157 | 2,373,299 | 389,177 | 231,942 | 283,904 | 111,814 | 292 | 43,170 |
| 4 | Rhode Island - | 61,702 | 223,229 | 32,098 | 51,180 | 67,741 | 12,604 | 207 | 240,274 |
| 5 | Connecticut - | 176,629 | 1,376,534 | 296,232 | 226,162 | 61,936 | 18,114 | 202 | 126,346 |
| 6 | Vermont - - | 131,578 | 2,008,737 | 213,944 | 674,548 | 16,276 | 5,600 | 48 | 6,677 |
| 7 | New York - | 1,153,413 | 10,496,021 | 1,701,935 | 4,636,547 | 499,126 | 75,980 | 525 | 258,558 |
| 8 | New Jersey - | 336,953 | 1,328,032 | 464,006 | 201,625 | 249,613 | 26,167 | 1,233 | 125,116 |
| 9 | Pennsylvania - | 685,801 | 3,187,292 | 618,179 | 1,303,093 | 232,912 | 50,127 | 1,156 | 857,475 |
| 10 | Delaware - - | 47,265 | 113,828 | 28,211 | 62,116 | 4,035 | 1,120 | 9 | 1,100 |
| 11 | Maryland - - | 218,765 | 457,466 | 105,740 | 176,050 | 133,197 | 10,591 | 619 | 48,841 |
| 12 | Virginia - - | 754,698 | 1,480,488 | 705,765 | 2,441,672 | 92,359 | 38,799 | 173 | 19,900 |
| 13 | North Carolina - | 544,125 | 674,349 | 386,006 | 1,413,242 | 28,475 | 48,581 | 20 | 4,663 |
| 14 | South Carolina - | 396,364 | 577,810 | 52,275 | 930,703 | 38,187 | 2,139 | 1,058 | 210,980 |
| 15 | Georgia - - | 449,623 | 605,172 | 156,122 | 1,467,630 | 19,346 | 1,853 | 418 | 9,213 |
| 16 | Alabama - - | 404,994 | 265,200 | 55,240 | 1,656,119 | 31,978 | 370 | 85 | 58,425 |
| 17 | Mississippi - | 369,482 | 359,585 | 14,458 | 682,945 | 42,896 | 499 | 66 | 43,060 |
| 18 | Louisiana - - | 283,559 | 153,069 | 11,769 | 65,190 | 240,042 | 32,415 | 349 | 359,711 |
| 19 | Tennessee - - | 606,969 | 472,141 | 367,105 | 2,886,661 | 19,812 | 71,100 | 34 | 10,760 |
| 20 | Kentucky - - | 536,439 | 931,363 | 434,935 | 2,622,462 | 25,071 | 6,226 | 350 | 108,597 |
| 21 | Ohio - - | 551,193 | 1,848,869 | 475,271 | 1,853,937 | 97,606 | 19,707 | 149 | 31,400 |
| 22 | Indiana - - | 357,594 | 742,269 | 110,055 | 1,289,802 | 61,212 | 17,231 | 309 | 73,628 |
| 23 | Illinois - - | 309,204 | 428,175 | 126,756 | 993,567 | 71,911 | 22,990 | 77 | 17,515 |
| 24 | Missouri - - | 270,647 | 100,432 | 90,878 | 1,149,544 | 37,181 | 6,205 | 97 | 37,075 |
| 25 | Arkansas - - | 109,468 | 59,205 | 10,680 | 489,750 | 2,736 | 415 | 8 | 6,036 |
| 26 | Michigan - - | 82,730 | 301,052 | 16,075 | 113,955 | 4,051 | 6,307 | 37 | 24,273 |
| 27 | Florida Ter. - | 61,007 | 23,094 | 1,035 | 20,205 | 11,758 | 10 | 60 | 6,500 |
| 28 | Wiskonsan Ter. - | 16,167 | 35,677 | 37 | 12,567 | 3,106 | 1,025 | 89 | 85,616 |
| 29 | Iowa Ter. - | 16,529 | 23,609 | 50 | 25,966 | 2,170 | 4,200 | 10 | 1,698 |
| 30 | Dist. of Columbia - | 3,092 | 5,566 | 3,507 | 1,500 | 52,895 | 850 | 163 | 42,933 |
| | | 9,344,410 | 33,787,008 | 7,256,904 | 29,023,380 | 2,601,196 | 593,534 | 8,553 | 2,945,774 |

## REMARKS ON THE AGRICULTURAL STATISTICS.

In connexion with the foregoing Tabular View, it is deemed important to add some general remarks in reference to the crops of 1841, and also particulars relating to the various articles enumerated, and the prospects of the country with regard to them for years come.

This tabular view has been prepared from the Census statistics taken in 1840, upon the agricultural products of the year 1839 as the basis. These have been carefully compared and estimated by a laborious examination and condensing of a great number of agricultural papers, reports, &c., throughout the Union, together with such other information as could be obtained by recourse to individuals from every section of the country. It is believed to be as correct as with the present data can be reached, although, could the entire attention of a competent person be devoted to the preparation of an annual Register, to be formed by collecting, comparing, and classifying the various items of intelligence, and conducting an extensive correspondence with reference to this subject, an amount of statistical and other information relating to the agricultural products of our country might be furnished, which would be exceedingly valuable to the whole nation, and a hundred fold more than repay all the expenditure for accomplishing the object. The statistics professedly derived from the census, which have been published during the past year in various papers and journals, are very incorrect, as any one can assure himself by comparing them with the Recapitulation just issued from the census bureau, by direction of the Secretary of State. They were probably copied from the returns of the marshals of the districts, before they had been suitably compared and corrected.

The estimates of the foregoing Tabular View are doubtless more closely accurate with regard to some portions of the country than others. The numerous agricultural societies in some of the States, with the reports and journals devoted to this branch of industry, afford a means of forming such an estimate as is not to be found in others. Papers of this description, giving a continued record of the crops, improvements in seeds, and means of culture, and direction of labor, are more to be relied on in this matter than the mere political or commercial journals, as they cannot be suspected, like these latter, of any design of forestalling or otherwise influencing the market, by their weekly and monthly report of the crops. Portions, too, of the Census statistics have probably been more accurately taken than others. In assuming them as the basis, reference must also be had to the annual increase of our population, equal to from 300,000 to 400,000, and in some of the States reaching as high as 10 per cent., as estimated by the ten years preceding the year 1840, and also to the diversion of labor from the works of internal improvement carried on by the States, in consequence of which the consumer has become the producer of agricultural products, the prices of articles raised, &c., with the various other causes which might occasion an increase or a decrease in the products of each State, and the sum total of agricultural supply. For convenient reference, the census return, total, of the population of each State, and also the estimated population according to annual increase, are added to the table, in separate columns, beside each other.

The crops of 1839, on which the Census statistics are founded, were, as appears from the notices of that year, very abundant in relation to nearly every product throughout the whole country; indeed, unusually so, compared with the years preceding. Tobacco may be considered an exception; it is described to have been generally a short crop.

The crops of the succeeding year are likewise characterized as abundant. The success which had attended industry in 1839 stimulated many to enter upon a larger cultivation of the various articles produced, while the stagnation of other branches of business drew to the same pursuit a new addition to the laboring force of the population.

Similar causes operated also to a considerable extent the past year. In 1841, the season may be said to have been less favorable in many respects than in the two preceding ones; but the increase of the laboring force, and the amount of soil cultivated, render the aggregate somewhat larger. Had the season been equally favorable, we might probably have rated the increase considerably higher, as the annual average increase of the grains, with potatoes, according to the annual increase of our population, is about 30 millions of bushels. Portions of the country suffered much from a long drought during the last summer, which affected unfavorably the crops more particularly liable to feel its influence, especially grain, corn, and potatoes. In other parts, also, various changes of the weather in the summer and autumn lessened the amount of their staple products below what might have been gathered, had the season proved favorable. Still, there has been no decisive failure, on the whole, in any State, so as to render importation necessary, without the means of payment in some equivalent domestic product, as has been the case in some former years, when large importations were made to supply the deficiency, at cash prices. In the year 1837 not less than 3,921,259 bushels of wheat were imported into the United States. We have now a large surplus of this and other agricultural products for exportation, were a market opened to receive them.

A glance at the specific crops is all that can be given. Some notice of this kind seems necessary, and may be highly useful to those who wish to embrace, in a narrow compass, the results of the agricultural industry of our country:

Wheat.—This is one of the great staple products of several States, the soil of which seems, by a happy combination, to be peculiarly fitted for its culture. Silicious earth, as well as lime, appears to form a requisite of the soil to adapt it for raising wheat to the greatest advantage, and the want of this has been suggested as a reason for its not proving so successful of cultivation in some portions of our country. Of the great wheat-growing States, during the past year, it may be remarked that, in New York, Pennsylvania, Virginia, and the Southern States, this crop seems not to have repaid so increased an harvest as was promised early in the season. Large quantities of seed were sown, and the expectation was deemed warranted of an unusually abundant increase. But the appearance of the chinch bug and other causes destroyed these hopes. In the northern part of Kentucky the crop "did not exceed one-third of an ordinary one." In some of the States, as in New Jersey, Ohio, Indiana, Michigan, and Illinois, the quantity raised was large, and the grain of a fine quality. The prospect of another year at the West, if we may judge at so early a period, is for an increased crop, as in some fertile sections more than double the usual amount is said to have been sown. The present open winter, however, may prove injurious, and these sanguine expectations not be realized. Indeed, the wheat and rye, as well as other grain crops, are in parts of the country becoming more uncertain, and, without more attention to the variety and culture, many kinds of grain must probably be still more confined to particular sections. Of all the States, Ohio stands foremost in the production of wheat, as she is also peculiarly fitted for all the grains, and the sustaining of a dense population. About one-sixth of the whole amount of the wheat crop of the country is raised by this State. To this succeed, in their order, Pennsylvania, New York, Virginia, Indiana, Tennessee, Kentucky, Illinois, Maryland, Michigan, and North Carolina. In some of the States a bounty is paid on the raising of wheat, which has operated as an inducement to the cultivation of this crop. The amount thus paid out of the State Treasury, in Massachusetts, for two years, was more than $18,000; the bounty was two dollars for every fifteen bushels, and five cents for every bushel above this quantity. Similar inducements might, no doubt, stimulate to still greater improvements and success in this and other products of the soil.

The value of this crop in our country is so universally felt, that its importance will be at once acknowledged. The whole aggregate amount of wheat raised is 91,642,957 bushels, which is nearly equal to that of Great Britain, the wheat crop of which does not annually exceed 100,000,000 of bushels. The supply demanded at home, as an article of food, cannot be less than eight or ten millions, and has been estimated as high as twelve million of barrels of flour, equal to about forty to sixty millions bushels of wheat. The number of flouring mills reported by the last census is 4,364, and the number of barrels of flour 7,404,562. Large quantities of wheat also are used for seed, and for food of the domestic animals, as well as for the purposes of manufacture. The allowance in Great Britain for seed, in the grains in general, as appears from McCulloch, is about one-seventh of the whole amount raised. Probably a much less proportion may be admitted in this country. Wheat is also used in the production of, and as a substitute for, starch. The cotton manufactories of this country are said to consume annually 100,000 barrels of flour for this and similar purposes; and in Lowell alone, 800,000 pounds of starch, and 3,000 barrels of flour, are said to be used in conducting the mills, bleachery and prints, &c., in the manufactories.

Could the immense surplus amount of this crop, in the West, find access to the ports of Great Britain, as the means of communication are daily becoming more easy and shorter in point of time, it would contribute much to enrich that grain producing section of our country.

Barley.—Comparatively little of this grain is raised in this country, with the exception of New York. Maine, Ohio, Pennsylvania, Michigan, Massachusetts, New Hampshire, and Illinois, rank next as producers of this crop. As it is raised principally to supply malt for the brewery, and small quantities of it only are used for the food of animals, or for bread, no great increase in this product is to be anticipated. The crop of 1841 appears to have been somewhat less than the usual one in proportion to the population.

Oats.—This grain in several of the States is evidently deemed an important object of cultivation, and large quantities of it are annually produced. As compared with wheat, it has the precedence in all of them, with the exception of Maine, Maryland, Ohio, and Georgia. New York takes the lead in the amount raised. Then follows, very closely, Pennsylvania; then Ohio, Virginia, Indiana, Tennessee, and Kentucky. It is a favorite crop, too, in the New England States. The crop of oats, in 1841, is believed to have been somewhat below a full one, and may therefore be considered as not having been so successful as some others, although large quantities of the seed were sown in the States where they are most abundantly cultivated. The consumption of oats in this country is confined particularly to the feeding of horses; but in some parts of Europe this article is used, to a considerable extent, as one of the bread stuffs. It enters, to a limited degree, into our articles of exportation, but it is not easy to form any exact estimate of the different appropriations of this crop, at home or abroad.

Rye.—This species of grain is mostly confined to a few States. The proportion which it bears to the other grains is probably greater in the New England States than in any other section of our country. There it likewise, to some extent, forms an article of food for the people. Pennsylvania, New York, New Jersey, Virginia, Kentucky, Ohio, and Connecticut, may be ranked as the chief producers of this crop; at least, these are among the States where it bears the greatest relative proportion to the other important crops. In 1841 it experienced, in some degree, similar vicissitudes with the other grains, and must likewise be estimated as below the increased crop which a more favorable season would probably have produced. The product of this crop is extensively used in many parts of our country for distillation, although the quantity thus applied has probably materially lessened within the few years past, and will doubtless hereafter undergo a still greater reduction.

Buckwheat.—This must be reckoned among the crops of minor interest in our country. With the exception of New York, Pennsylvania, New Jersey, Ohio, Connecticut, Virginia, Vermont, Michigan, and New Hampshire, very little attention seems to be given to the culture of this grain. In England it is principally cultivated, that it may be cut in a green state as fodder for cattle, and the seed is used to feed poultry. In this country it is also applied in a similar manner; and is sometimes ploughed in, as a means of enriching the soil. To a limited extent, the grain is further used as an article of food. The crop of 1841 may be considered as, on the whole, above an average one. This may in part be attributed to the fact that when some of the other and earlier crops failed, resort was had to buckwheat, as a later crop, more extensively than is usual. It is a happy feature in the adaptation of our climate, that the varieties of products are so great as to enable the agriculturist often thus to supply the deficiency in an earlier crop, by greater attention to a later one. There was more buckwheat sown than is commonly the case, and the yield was such as to compensate for the labor and cost of culture.

Maize or Indian Corn.—Tennessee, Kentucky, Ohio, Virginia, and Indiana, are, in their order, the greatest producers of this kind of crop. In Illinois, North Carolina, Georgia, Alabama, Missouri, Pennsylvania, South Carolina, New York, Maryland, Arkansas, and the New England States, it appears to be a very favorite crop. In New England, especially, the aggregate is greater than in any of the grains except oats. More diversity seems to have existed in this crop, in different parts of the country, the past year, than with most of the other products of the soil; and hence it is much more difficult to form a satisfactory general estimate. In some sections the notices are very favorable, and speak of "good crops," as in portions of New England; of "a more than average yield," as in New Jersey; of being "abundant," as in parts of Georgia; or, "on the whole, a good crop," as in Missouri; "on the whole, a tolerable one," as in Kentucky. In others, the language is of "a short crop," as in Maryland; or "cut off," as in North Carolina; or "below an average," as in Virginia. On the whole, however, from the best estimate which can be made, it is believed to have equalled, if it did not exceed, an average crop. The improvement continually making in the quality of the seed (and this remark is likewise applicable, in various degrees, to other products) augurs well for the productiveness of this indigenous crop, as it has been found that new varieties are susceptible of being used to great advantage. Considered as an article of food for man, and also for the domestic animals, it takes a high rank. No inconsiderable quantities have likewise been consumed in distillation; and the article of kiln-dried meal, for exportation, is yet destined, it is believed, to be of no small account to the corn-growing sections of our country. It will command a good price, and find a ready market in the ports which are open to its reception. But the importance of this crop will doubtless soon be felt in the new application of it to the manufacture of sugar from the stalk, and of oil from the meal. Below will be found some comparisons and deductions on this subject, and a view of the true policy of our country in relation to it and to agricultural industry generally.

Potatoes.—The Tabular View shows, that in quite a number of States the amount of potatoes raised is very great. New York, Maine, Pennsylvania, Vermont, New Hampshire, Ohio, Massachusetts, and Connecticut, are the great potato-growing States; more than two-thirds of the whole crop are raised by these States. Two kinds, the common Irish and the sweet potato, as they are called, with the numerous varieties, are embraced in our Agricultural Statistics. When it is recollected that this product of our soil forms a principal article of vegetable food among so large a class of our population, its value will at once be seen. The best common or Irish potatoes, as an article of food for the table, are produced in the higher northern latitudes of our country, as they seem to require a colder and moister soil than corn and the grains generally. It is on their peculiar adaptation in this respect, that Ireland, Nova Scotia, and parts of Canada, are so peculiarly successful in the raising and perfecting of the common or Irish potatoes. It is estimated that, in Great Britain, an acre of potatoes will feed more than double the number of individuals than can be fed from an acre of wheat. It is also asserted that, whenever the laboring class is mainly dependent on potatoes, wages will be reduced to a minimum. If this be true, the advantage of our laboring classes over those of Great Britain, in this respect, is very great. The failure of a crop of potatoes, too, where it is so much the main dependence, must produce great distress and starvation. Such is now the case in Ireland and parts of England and Scotland. Another disadvantage of relying on this crop as a chief article of food for the people is, that it does not admit of being stored up as it is, or converted into some other form for future years, as do wheat and corn. Potatoes also enter largely into the supply of food for the domestic animals; besides which, considerable quantities are used for the purpose of the manufacture of starch, of molasses, and distillation. New varieties, which have been introduced within a few years past, have excited much attention, and many of them have been found to answer a good purpose. Increased improvement, and with yet more successful results in this respect, may be anticipated.

The crop of potatoes in 1841 suffered considerably in many parts of the country, and, perhaps, came nearer to a failure than has been know for some years. In portions of New England and New York this was particularly the case. In other sections, however, if a correct judgment may be formed from the notices of the crop, there appears to have been a more than average increase. In proportion to her population, Vermont may be considered foremost in the cultivation of potatoes. The sweet potato is raised with some success for market as far north as New Jersey, though the quality of the article is not equal to that which is produced in the more southern latitudes. As the climate of the West, compared with that of the Atlantic border, varies perhaps nearly several degrees within the same parallels of latitude, it may be supposed that this variety of the potato can be cultivated even as high up as Wiskonsan or Iowa, in favorable seasons, with tolerable success.

Hay.—This product was remarkably successful during the past year in particular sections of our country, in others less so. In Maine, and in the New England States generally, there was more than an average yield. In New York, which ranks highest in the Tabular View, it was lighter than usual. In New Jersey, and the middle States generally, it was considered "good;" in the more Southern and Southwestern ones, little, comparatively, is cultivated. In the Northwestern States it appears to have been about an average crop. The extensive prairies of the West admit of being covered with luxuriant crops of grass, of better varieties; and when this is done they will prove far more valuable, both for the purposes of stock, and also in raising hay for the Southern market at New Orleans, which is already supplied, to some extent, with this product, brought down the Mississippi, from Indiana, Ohio, and Illinois, as well as by the Atlantic coast, from the New England States and New York. Hay is also an article of export, in some quantities, to the West Indies.

Flax and Hemp.—More difficulty has been found in forming an estimate of these two articles than any other embraced in the Tabular View. They are combined in the Census statistics, and the amount is sometimes given in tons, sometimes in pounds, so that it is not easy always to discriminate between them. More than half of the whole combined amount must probably be allotted to flax, as but little hemp, comparatively, is known to be raised. Flaxseed is used for the manufacture of linseed oil, considerable quantities of which are annually imported into this country for various purposes. The oil cake, remaining after the oil is expressed, is a well-known article in use, mingled with the food of horses and other animals.

In these articles of flax and hemp combined, if the Recapitulation of the Census statistics is correct, Virginia is in advance of all the other States; then follow Missouri, North Carolina, Ohio, Kentucky, Indiana, Tennessee, Pennsylvania, New Jersey, Illinois, New York, and other States. It is believed, however, that some of the amounts, as returned by the marshals, should rather have been credited to pounds for flax than to tons, as more nearly corresponding to the actual condition of the crops in our country. Kentucky probably ranks the highest with respect to the production of hemp. The crop of 1840 was a great failure, and that of the past year also suffered much from the dry weather. There is not so much attention paid to the culture of this article as its importance demands; yet there is every ground of encouragement for increased enterprise in the production of hemp, from the supply required in our own country. The difficulty most in the way of its success, hitherto, has been the neglect, either from ignorance, inexperience, or some other cause, properly to prepare it for use by the best process of water-rotting. The agriculturists of our country seem, in this respect, to have too soon yielded to discouragement. The desirableness of some new and satisfactory results on this subject will be seen from the fact that it is stated the annual consumption of hemp in our navy amounts to nearly two thousand tons; besides which, the demand for the rest of our shipping is not less than about eleven thousand tons more; making an aggregate of nearly thirteen thousand tons—the price of which is put at from $220 to $250, and by some even as high as $280 per ton, together with other and inferior qualities, which are used to supply the deficiency of the better article. Our hemp, it is further stated, on high authority, when properly water-rotted, proves, by actual experiment, to be one-fourth stronger than Russia hemp, to take five feet more run, and to spin twelve pounds more to the four hundred pounds. When so much is felt and said on the increase of our navy prospectively, it is an object worthy of attention to secure, if possible, the production of hemp in our own country, adequate to all our demands. The introduction, too, of gunny bags, and of Scotch and Russia bagging, and iron hoops for cotton, renders this direction of the hemp product more necessary and important. It is hoped that some process of water-rotting, which will prove at once both cheap and satisfactory, may yet be discovered by the inventive genius of our countrymen, who are not wont to be discouraged at any slight obstacles.

Tobacco.—The crop of 1839, in this article, on which the Census statistics are founded, is deemed, as appears from the notices on this subject, to have been a short one, and below the average. The crop of the past year was much more favorable—beyond an average; indeed, it is described in some of the journals as "large."

Virginia, Kentucky, Tennessee, North Carolina, and Maryland, are the great tobacco-growing States. An advance in this product is likewise in steady progress in Missouri, where the crop of 1841 is estimated at nearly 12,000 hogsheads, and for 1842 it is expected that as many as 20,000 may be raised. Some singular changes are going forward with regard to this great staple of several of the States. Reference is here intended to the increasing disposition evinced, as well as the success thus far attending the effort, to cultivate tobacco in some of the Northern and Northwestern States. The tobacco produced in Illinois has been pronounced by competent judges from the tobacco-growing States, and who have there been engaged in the culture of this article, to be superior, both in quality and the amount produced per acre, to what is the average yield of the soils heretofore deemed best adapted to this purpose. In Connecticut, also, the attention devoted to it has been rewarded with much success; 100,000 pounds are noticed as the product of a single farm of not more than fifty acres. It is, indeed, affirmed that tobacco can be raised in Indiana, Ohio, Kentucky, and Tennessee, at a larger profit than even wheat or Indian corn. Considerable quantities, also, were raised in 1841 in Pennsylvania and Massachusetts, where it may probably become an object of increased attention. The agriculturists of these States, if they engage in the production of this crop, will do so with some peculiar advantages. They are accustomed to vary their crops, and to provide means for enriching their soils. Tobacco, as it is well known, is an exhausting crop, especially so when it is raised successive years on the same portions of soil. The extraordinary crops of tobacco which have heretofore been obtained have, indeed, enriched the former proprietors, but the present generation now find themselves, in too many instances, in the possession of vast fields, once fertile, that are now almost or wholly barren, from an inattention to the rotation of crops. The difficulty of cultivating a worn-out soil has induced, and will continue to induce, the emigration of the most enterprising to new lands, where they will bear in mind the lessons that dear-bought experience has taught them. It is a provision of Nature herself, that there must be a suitable rotation of crops; and all history sanctions the conclusion, that the continued cultivation of any specific crop, without an adequate supply of the means of restoration from year to year, must eventually and inevitably terminate in impoverishing its possessors, and entailing on them the necessity of removal from their native homes, if they would not sink in degradation. Had a variety and rotation of crops been resorted to on the lands now so left, the countries suffering by such a course had been far more rich and prosperous.

The value of tobacco exported in different forms in 1839 was $10,449,155, and the amount of tobacco exported in 1840 was about 144,000,000 of pounds. The greater part of this goes to England, France, Holland, and Germany.

Cotton.—This, it is well known, is the great staple product of several States, as well as the great article of our exports, the price of which, in the foreign market, has been more relied on than any thing else to influence favorably the exchanges of this country with Great Britain and Europe generally. The cotton crop of the United States is more than one-half of the crop of the whole world. In 1834, the amount was but about 450,000,000 of pounds; the annual average now may be estimated at 100,000,000 of pounds more; the value of it for export at about $62,000,000. The rise and progress of this crop, since the invention of Whitney's cotton gin, has been unexampled in the history of agricultural products. In the year 1783, eight bales of cotton were seized on board of an American brig, at the Liverpool custom-house, because it was not believed that so much cotton could have been sent at one time from the United States! The cotton crop of 1841, compared with that of 1839 and 1840, was probably less, by from 500,000 to 600,000 bales. In the early part of the last cotton-growing season, an average crop was confidently anticipated; but this hopeful prospect was not realized. In portions of the cotton-producing States, as in parts of Georgia, however, the crop was greater than usual; and in Arkansas it has been estimated at a gain, over that of 1839, of 33⅓ per cent.; but probably, owing to its having suffered from the boll worm, it should be set down at 20 or 25 per cent. A similar advance is expected in future years, among other causes, from the great increase of population by immigration. Mississippi, Georgia, Louisiana, and Alabama, South Carolina, and North Carolina, are, in their order, the great cotton-growing States. An important fact deserves notice here, on account of the relation which the cotton crop bears to other crops. Whenever (to whatever cause it may be owing) the price of cotton is low, the attention of cultivators, the next year, is more particularly diverted from cotton to the culture of corn, and other branches of agriculture, in the cotton-producing States. As cotton is now so low, and so little in demand in the foreign market, unless a market be created at home it must necessarily become an object of less attention to the planters; and it cannot be expected that the agricultural products of the West will find so ready a sale in the Southern market as in some former years. Other countries, too, as India, Egypt, and other parts of Africa, Brazil, and Texas, are now coming more decidedly into competition with the cotton-growing interest of our country; so that an increase of this product from those countries, and a corresponding depression in ours, are to be expected. The amount of India cotton imported into England in 1840 was 76,703,295 pounds; almost equal to the whole cotton crop of North Carolina and South Carolina, or to that of Alabama, for the past year, and nearly double the amount produced by Tennessee, Arkansas, and Florida, combined; being, also, an increase on the importation of cotton from India, the preceding year, of 30,000,000 of pounds, and, in amount, nearly one-sixth of the whole quantity imported during the same year from the United States. From the report of the Chamber of Commerce of Bombay, it appears that, from the 1st of June, 1840, to the 1st of June, 1841, the imports of cotton into Bombay amounted to 174,212,755 pounds; and the whole India cotton crop is estimated, on good authority, at 190,000,000 of pounds. This is a larger quantity than America produced up to 1826, and more than was consumed by England in the same year, and nearly one-third of the whole estimated crop of the United States in 1841. From these facts, it is evident that it is becoming more and more the settled policy of England to encourage the production of cotton in India, while it is equally certain that a foreign market cannot be relied on for our cotton, to the same extent as it has hitherto been. An English authority, speaking of the decline of England and of her manufactures, as having commenced a downward progress, in accounting for this decline, attributes the distress in Leeds, and other places, to the landholders, who, by excluding the foreign bread stuffs, have driven foreigners to manufacture in self-defence. This decline, not being confined merely to her old staple of woollens, must, too, operate in the reduction and diminution of cotton exported from this country. The following statement confirms the position now taken:

"In 1824, Great Britain exported to all foreign countries, including the British possessions, of cloths, &c., 567,317 pieces; in 1828, 566,596 pieces; in 1830, 440,360 pieces; and in 1840, only 250,962 pieces. During the same year last named, (1840,) the total manufactured in only one district in Belgium and Prussia, all within a day's journey of each other, was 333,245 pieces; so that, in one district only, there was made more than was exported by Britain to all the world, by 76,233 pieces."

RICE.—This product is cultivated to comparatively a very little extent in the United States, except in South Carolina and Georgia. In the former of these, it is an object of no small attention, and ranks second only to cotton. It forms a considerable article of export from this country to Europe. England, however, imports annually large quantities of rice from India. The crop of rice in 1841 is said to have been, on the whole, a very good one, equal, if not superior, to the usual average.

SILK COCOONS.—Notwithstanding the disappointment of many who, since the year 1839, engaged in the culture of the *morus multicaulis* and other varieties of the mulberry, and the raising of silkworms, there has been, on the whole, a steady increase in the attention devoted to this branch of industry. This may be, in part, attributed to the ease of cultivation; both as to time and labor required, and in no small degree, also, to the fact that, in twelve of the States, a special bounty is paid for the production of cocoons, or of the raw silk. Several of these promise much hereafter in this product, if a reliance can be placed on the estimates given in the various journals more particularly devoted to the record of the production of silk. There seems, at least, no ground for abandoning the enterprise, so successfully begun, of aiming to supply our home consumption of this important article of our imports. In Massachusetts, Connecticut, New York, Pennsylvania, Delaware, Tennessee, and Ohio, there has been quite an increase above the amount of 1839. The quantity of raw silk manufactured in this country the past year is estimated at more than 30,000 pounds. The machinery possessed for reeling, spinning, and weaving silk, in the production of ribbons, vestings, damask, &c., admit of its being carried to great perfection, as may be seen by the beautiful specimens of various kinds deposited in the National Gallery at the Patent Office. The amount of silk stuffs brought into this country in some single years, from foreign countries, is estimated at more in value than $20,000,000. The silk manufactured in France in 1840 amounted to $25,000,000; that of Prussia to more than $4,500,000. Should one person in a hundred of the population of the United States produce annually 100 pounds of silk, the quantity would be nearly 18,000,000 pounds, which, at $5 per pound, (and much of it might command a higher price,) would amount to nearly $90,000,000—nearly $30,000,000 above our whole cotton export, nine times the value of our tobacco exports, and nearly five or six times the average value of our imports of silk. That such a productiveness is not incredible, as at first sight it may seem, may be evident from the fact, that the Lombard Venetian kingdom, of a little more than 4,000,000 of population, exported in one year 6,132,950 pounds of raw silk; which is a larger estimate, by at least one-half, for each producer, than the supposition just made as to our own country. Another fact, too, shows both the feasibility and the importance of the cultivation of this product. The climate of our country, from its Southern border even up to 44 degrees of north latitude, is suited to the culture of silk. It needs only a rational and unflinching devotion to this object, to place our country soon among the greatest silk-producing countries of the world.

Sugar.—Louisiana is the greatest sugar district of our country. The crop of 1841 appears to have been injured by the early frosts; the amount, therefore, was not so great as that of 1839, by nearly one-third.

The progress of the sugar manufacture and the gain upon our imports has been rapid. In 1839 the import of sugars was 195,231,273 pounds, at an expense of at least $10,000,000; in 1840, about 120,000,000 pounds, at an expense of more than $6,000,000. A portion of this was undoubtedly exported, but most of it remained for home consumption. More than 30,000,000 pounds of sugar, also, from the maple and the beet root were produced in 1841, in the Northern, Middle, and Western States; and, should the production of cornstalk sugar succeed, as it now promises to do, this article must contribute greatly to lessen the amount of imported sugars. Indeed, such has been the manufacture of the sugar from the cane for the last five years, that were it to advance in the same ratio for the five to come, it would be unnecessary to import any more sugar for our home consumption. Some further remarks on this particular topic will be found below, in connexion with the subject of cornstalk sugar.

Wine.—North Carolina, Pennsylvania, Virginia, Ohio, and Indiana, rank highest, in their order, in the production of wine. In Maryland, Georgia, Louisiana, Maine, and Kentucky, some thousands of gallons are likewise produced. Two acres in Pennsylvania, cultivated by some Germans, have the past autumn yielded 1,500 gallons of the pure juice of the grape, and paid a nett profit of more than $1,000. Still, the quantity produced is small. The cultivation of both the native and foreign grape, as a fruit for the table, seems to be an object of increasing interest in particular sections of our country; but any very decided advances in this product are scarcely to be expected.

It has thus been attempted to give at least a bird's eye view of the articles enumerated in the Tabular Statistics. There are also a variety of other products which might, perhaps, have been included in the agricultural statistics. These are hops, peas, beans, beets, turnips, and other roots and vegetables; the products of the dairy, of the orchard, and of the bee-hive; wool, live stock, and poultry. Many interesting comparisons in relation to some of the above might be formed from the Census statistics, such as would exhibit in a striking manner the resources our country possesses in the products of her soil and the labor of her hardy yeomanry; but it has been deemed best to omit them in the present report, merely subjoining the Census statistics on these particular articles to the Tabular View. Yet, in estimating the home supply for the sustenance and comfort both of man and beast, these too should always be taken into the account, as a very important item deserving notice.

The whole of the summary now given, with the rapid glance taken at the various products, presents our country as one richly favored of Heaven in climate and soil, and abounding in agricultural wealth. Probably no country can be found on the face of the globe, exhibiting a more desirable variety of the products of the soil, contributing to the sustenance and comfort of its inhabitants. From the Gulf of Mexico to our Northern boundary, from the Atlantic to the far West, the peculiarities of climate, soil, and products, are great and valuable. Yet these advantages admit of being increased more than an hundred fold. The whole aggregate of the bread stuffs, corn, and potatoes, is 624,518,510 bushels, which, estimating our present population at 17,835,217, is about 35⅗ bushels for each inhabitant; and, allowing 10 bushels to each person—man, woman, and child—(which is double the usual annual allowance as estimated in Europe,) and we have a surplus product, for seed, food of stock, the purposes of manufacture, and exportation, of not less than 446,166,340 bushels; from which, if we deduct one-tenth of the whole amount of the crops for seed, it leaves for food of stock, for manufactures, and exportation, a surplus of at least 370,653,627 bushels. Including oats, the aggregate amount of the crops of grain, corn, and potatoes, is equal to nearly 755,200,000 bushels, or 42⅓ bushels to each inhabitant. The number of persons employed in agriculture, according to the census of 1840, was 3,717,756. This, it is presumed, refers to the male free white adult population.

The articles of CORN OIL and corn for SUGAR, together with OIL from LARD and the castor bean, &c., deserve more than a passing notice. They are destined, it is believed, to call forth increased enterprise among the agriculturists of our country:

CORN OIL is produced from corn meal by fermentation, with the aid of barley malt. It has been produced and used for some time past in certain distilleries, by skimming off the oil as it rises on the meal in fermentation in the mash tub. It has, however, lately become the subject of particular attention, as an article of manufacture, and with success. The meal, after it has been used for the production of this oil, it is said, will make better and harder pork, when fed out to swine, than before. The oil is of a good quality, of a yellowish color, and burns well. Further clarification, it is probable, may render it as colorless as the best sperm oil. Whether or not this may be the case, the ease with which it is made offers strong inducements to engage in the production of this article.

But a more important object in the production of Indian corn is doubtless the manufacture of SUGAR from the stalk. In this point of view, it possesses some very decided advantages over the cane. The juice of the cornstalk by Beaumé's saccharometer, reaches to 10° of saccharine matter, which, in quality, is more than three times that of beet, five times that of maple, and fully equals, if it does not even exceed, that of the ordinary sugar cane in the United States. By plucking off the ears of corn from the stalk as they begin to form, the saccharine matter, which usually goes to the production of the ear, is retained in the stalk; so that the quantity it yields is thus greatly increased. One thousand pounds of sugar, it is believed, can easily be produced from an acre of corn. Should this fact seem incredible, reference need only be made to the weight of fifty bushels of corn in the ear, which the juice so retained in the stalk would have ripened, had not the ear, when just forming, been plucked away. Sixty pounds may be considered a fair estimate, in weight, of a bushel of ripened corn; and, at this rate 3,000 pounds of ripened corn will be the weight of the produce of one acre. Nearly the whole of the saccharine part of this remains in the stalk, besides what would have existed there without such a removal of the ear. It is plain, therefore, that the sanguine conclusions of experimenters the past year have not been drawn from insufficient data. Besides, it has been ascertained, by trial, that corn, on being sown broadcast, (and so requiring but little labor, comparatively, in its cultivation,) will produce five pounds per square foot, equal to 108 tons to the acre for fodder in a green state; and it is highly probable that, when subjected to the treatment necessary to prepare the stalk, as above described, in the best manner for the manufacture of sugar, a not less amount of crop may be produced. Should this prove to be the case, one thousand weight of sugar per acre might be far too low an estimate. Experiments on a small scale have proved that *six* quarts of the juice, obtained from the cornstalk sown broadcast, yielded one quart of crystallized sirup, which is equal to 16 per cent; while for one quart of sirup it takes thirty-two quarts of the sap of maple.

Again, the cornstalk requires only one-fifth the pressure of the sugar cane, and the mill or press for the purpose is very simple and cheap in its construction, so that quite an article of expense will thereby be saved, as the cost of machinery in the manufacture of sugar from the cane is great. Only a small portion of the cane, also, in this country, where it is an exotic, ordinarily yields saccharine matter, while the whole of the cornstalk, the very top only excepted, can be used.

Further, while cane requires at least eighteen months, and sedulous cultivation and much hard labor, to bring it to maturity, the sowing and ripening of the cornstalk may be performed, for the purpose of producing sugar, with ease, within 70 to 90 days; thus allowing not less than two crops in a season in many parts of our country. The stalk remaining, after being pressed, also furnishes a valuable feed for cattle, enough, it is said, with the leaves, to pay for the whole expense of its culture. Should it be proved, by further experiments, that the stalk, after being dried and laid up, can, by steaming, be subjected to the press without any essential loss of the saccharine principle, as is the case with the beet in France, so that the manufacture of the sugar can be reserved till late in the autumn, this will still more enhance the value of this product for the purpose. It may also be true that, as in the case of the beet, no animal carbon may be needed, but a little lime water will answer for the purpose of clarification; after which, the juice may be boiled in a common kettle, though the improved method of using vacuum pans will prove more profitable when the sugar is made on a large scale.

Corn, too, is indigenous, and can be raised in all the States of the Union, while the cane is almost confined to one, and even in that the average amount of sugar produced, in ordinary crops, is but 900 or 1,000 pounds to the acre; not much beyond one-third of the product in Cuba and other tropical situations, where it is indigenous to the soil. The investment in the sugar manufactories from the cane in this country has, it is believed, paid a poorer return than almost any other agricultural product. The laudable enterprise of introducing into the United States the culture of the cane and the manufacture of sugar from the same, has, it is probable, been hardly remunerated, though individual planters, on some locations, have occasionally enriched themselves. The amount of power required, with the cost of the machinery and the means of cultivation, will ever place this branch of industry beyond the reach of persons of moderate resources, while the apparatus and means necessary for the production of corn and other crops lie within the ability of many.

Should the manufacture of sugar from the cornstalk prove as successful as it now promises, enough might soon be produced to supply our entire home consumption, towards which, as has been mentioned, at least 120,000,000 pounds of foreign sugars are annually imported, and a surplus might be had for exportation. In Europe, already, more than 150,000,000 pounds of sugar are annually manufactured from the beet, which possesses but one-third of the saccharine matter that the cornstalk does; and there are not less than 500 beet sugar manufactories in France alone. By this manufacture of sugar at the West, the whole amount of freight and cost of transportation on imported sugar might also be saved—a sum nearly equal, it is probable, to the first cost of the article at the seaport; so that the price of sugar is at least doubled, if not almost trebled, to the consumer at a distance, when so imported. Not less than 6,000,000 pounds of sugar, it is said, are annually imported, for home consumption, in the single city of Cincinnati.

Oil and Stearine from Lard and the Castor Bean, &c.—These two are articles which will hereafter attract much attention in many parts of our country. The use of lard instead of oil, for lamps of a peculiar construction, has been heretofore attempted with good success, as an article of economy. It has even been adopted in the light-houses in Canada, on the lakes, and is said to burn longer, and free from smoke, while the cost of the article is stated to be but about one-third the cost of sperm oil. But it has now been discovered that oil equal to sperm can be easily extracted from lard, at great advantage, and that it is superior to lard for burning, without the necessity of a copper-tubed lamp. Eight pounds of lard equal in weight one gallon of sperm oil. The whole of this is converted into oil and stearine, an article of which candles that are a good substitute for spermaceti can be made. Allowing, then, for the value of the stearine above the oil, and it may be safely calculated, that when lard is six cents per pound, as it is now but four or five cents at the West, a gallon of oil can be afforded there for fifty cents; since the candles from the stearine will sell for from twenty-five to thirty cents per pound.

Stearine for this purpose has also recently been obtained from castor oil, the product of the *palma christi*, or castor bean, a plant successfully cultivated in portions of our country.

Oil, it is well known, is an article of large consumption in our country. The amount of sperm oil from our whale fisheries, for the year 1841, was 4,965,754 gallons; of whale and fish oil, 6,362,661 gallons—making a sum total of 11,328,415 gallons. The amount for 1840 did not vary much from the same. The amount of sperm and whale oil exported in 1840 was 4,955,486 gallons, leaving for home consumption 6,372,929 gallons. In the year 1840 there was also exported from this country 853,938 pounds of spermaceti candles. From these statements, which do not include linseed, olive, and other oils, it will be seen that the encouragement for the manufacture of oil and stearine, from corn meal, and lard, and the castor bean, is very great. Large quantities of oil for dressing cloths, oiling machinery, &c., are required in the manufactories. In the factories of Lowell, simply, not less than 78,689 gallons are thus needed.

Oil, too, enters largely into the composition of soap; and should it be found, as perhaps by experiment it may be, that the corn meal and lard oils are not liable to the objection which, it is said, attends the use of whale oil in this respect, the demand for this purpose may be of importance to the producers of this article.

It is not improbable that, by further experiments, an oil may be obtained from the cotton seed, of such an excellent quality as to make what is now almost a total loss an article of great value. The Germans at the West are said to obtain oil in some quantities from the seed of the pumpkin; and the seeds of the sunflower, and rape seed, it is well known, have been used to advantage for the same purpose.

While Great Britain and other foreign countries have steadily pursued a policy designed and obviously tending to exclude our agricultural products from their trade, it becomes an object of no small consequence to us to evince, as the foregoing statistics have done, how much wealth we possess in our surplus products of wheat, and various other articles of food, together with the prospective increase of these and other products suited to call out the enterprise and industry of our people, and which, on a fair reciprocity with foreign nations, might greatly contribute to develope and enlarge the resources of our country. Should protective duties abroad continue to exclude our surplus products, the channels of present industry must be diverted to meet the emergency. It may be well for us to learn what makes us truly independent, and also happy. Extravagance in communities, as well as in individuals, leads to inevitable embarrassment. Credit may, indeed, be used for a while as a palliative, but the only effectual remedy is retrenchment and economy. When a constant drain of the precious metals is pressing us to meet the expenditures of our people for foreign imports, and when foreign nations encourage a home policy, by prohibitory duties on our products, it becomes a serious question with us how far and in what directions the industry now expended in raising a surplus beyond our own wants can be diverted to other objects of enterprise. To decide a question of such magnitude and interest, reference must obviously be had to the articles imported, to determine what can be raised or produced in our own country; and possibly it may be found that most of the leading articles, either of necessity or luxury, thus supplied, can be raised and perfected to advantage by the labor and skill of our own inhabitants. The remedy thus lies within our own power. Our true policy is to give variety and stability to our productive industry. Extraordinary prices in particular crops inevitably lead to dangerous extremes in the culture of the same, to the neglect of the usual and necessary articles of produce. Cupidity soon urges even the agriculturist into a spirit of speculation, which too often terminates in great embarrassment, and sometimes in utter ruin. The credulity of Americans is proverbial; and this has, to some extent, been illustrated in the almost universal mania that attended the *morus multicaulis* speculation: a single sprout sold for one dollar, when millions might be produced in one season. Incredulity, likewise, is sometimes yet more injurious to a community, as this shuts out all the light which science pours in, and rests contented with following the beaten path of traditionary leaders. Happy would it be for our country if the spirit of investigation and severe experiment should induce effort to test principles, without diverting it from those channels of industry that will assuredly bring the comforts of life. The balance of trade against us, resulting from our improvidence, can no longer be settled, or, rather, as it might be said, postponed by the remittance of State securities, which seem to have run a brief career, leaving still a vast debt, that can only be honestly cancelled by much *hard work*.

Notwithstanding all this, the daily importation of goods (including many articles of luxury) goes forward to a truly alarming extent; TWO-THIRDS OF WHICH ARE ON FOREIGN ACCOUNT, TO BE PAID FOR IN SPECIE OR ITS EQUIVALENT! Without the admitted means of liquidating the balances against us in foreign countries, we seem still madly bent on increasing them. Eleven and a half millions of dollars in specie were shipped from the single port of New York within the fifteen months preceding January, 1842; and with such a drain going on continually, every dollar of specie in the United States will soon be insufficient to meet our liabilities abroad. Stern necessity, however, will, ere long, extend her laws over us, compelling us to limit our expenditures to the actual income, and to effect exchanges of our agricultural products, either at home or abroad, for the products of mechanical skill and industry. This would be the case, even were the amount of our surplus product likely to be lessened.

Yet there is no reason to apprehend that our surplus products will be diminished. On the contrary, the stoppage of numerous canals, railroads, and other works of internal improvement by the States, will dismiss many laborers, who will resort to agriculture and kindred pursuits; so that the amount of products raised will probably exceed those of former years. The extensive tracts, too, of our unoccupied soil invite emigration to our shores; and when we consider the present extreme distress in portions of the manufacturing districts of Great Britain, we are doubtless to expect a large increase of our population in future years from this cause. It is stated, on high authority, that as many as 20,000 persons die annually in Great Britain, from the want of sufficient and wholesome food. Let the fact of our vast surplus product of the bread stuffs and other articles of food become known abroad, and is it not reasonable to look for increasing additions to the emigration from Europe to this country?—especially since the distance is now, as it were, so much shortened, that a voyage may be compassed in 12 or 15 days. A line of steam packets, too, is in contemplation, to run from Bremen to one of our ports, with the design principally of conveying emigrants, which, no doubt, will prove the means of bringing to us a hardy, industrious German population, most of whom will probably engage in agriculture. With these additions to her laboring force, our growing country, if she be true to herself, offers an unwonted scope for exertion. The diversities of her climate the varieties of her soil, her peculiar combination of population, her mineral, animal, agricultural, mechanical, and commercial wealth, developed as they may be by a rightful regard to her necessities, might thus place her at last in a situation as enviable for her political and moral influence, as for the physical energies she had called into life and action. Our republic needs, indeed, only to prove her own strength, and wisely direct her energies, to become, more than she has ever been, the point on which the eye of all Europe is fixed, as a home of plenty for the destitute, and a field where enterprise reaps its sure and appropriate reward.

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